May 1974 Number 357-Part II

Solar-Geophysical Data comprehensive reports

Data for November 1973 –October 1973
& Miscellanea

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Solar - Geophysical Data

NO. 357 MAY 1974

Part II (Comprehensive Reports)

DATA FOR
NOVEMBER 1973
OCTOBER 1973
& MISCELLANEA

NATIONAL GEOPHYSICAL AND SOLAR - TERRESTRIAL DATA CENTER
BOULDER, COLORADO

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SOLAR - GEOPHYSICAL DATA

No. 357

Issued in two parts

Hope I. Leighton, Editor

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Solar - Terrestrial Data Services Division

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For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

SOLAR FLARES
Confirmed

NOVEMBER 1973

OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMP-ORTANCE	OBS.		MEASUREMENTS					REMARKS
	DATE NOV	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	NOAA/PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Mα	MAX. INT. %	
021 CRON	01	0241E	0304	0245	N22	W03	.306	12590	31.9	23D	-N								2
022 MANI	01	0328E	0332D	0330	N20	W07	.293	12590	31.6	4D	--N	1		0330	.62	.65			U 2
GRPS0023	01	0740	0807	0745	S15	W58	.871	12584	28.0	27	-N				.59				2 2 2 5
CRON	01	0739E	0758	0745	S12	W56	.848	12584	28.1	19D	-N				.60				
CATA	01	0740	0815	0745	S18	W59	.885	12584	27.9	35	-N	1		0745	.58	1.19		(182)	
025 MCMA	01	1716	1721D	1718	S18	W66	.932	12584	27.8	5D	--F		C	1718	.31	.80			D 3
GRPS0026	01	1915	2007	1935	S18	W66	.932	12584	27.9	52	-N				.51				3 2 2 3
BOUL	01	1915E	2052D	1918	S16	W64	.917	12584	28.0	97D	-F		V	1918		1.90			
RAMY	01	1925	2007D	1952	S18	W65	.926	12584	27.9	42D	-N	3	C		.65				U
RAMY	01	1925	2007D	1930	S18	W65	.926	12584	27.9	42D	-N	3	C		1.02				U
MCMA	01	1932E	1956D		S18	W67	.938	12584	27.8	24D	-N		C	1950	.36	1.20			E
	01	2100	2230	NO FLARE PATROL															
	02	0600	0620	NO FLARE PATROL															
	02	0626	0638	NO FLARE PATROL															
029 CANR	02	1223E	1231	1225	S13	W60	.883	12584	29.0	8D	--F		V	1231	.83	1.50			3
	02	1913	1947	NO FLARE PATROL															
	02	1956	2128	NO FLARE PATROL															
GRPS0030	03	0012	0101	0034	S18	W85	.998	12584	27.6	49	2N				1.63				3 3 3 3
VORO	03	0012	0025	0017	S26	W88	1.000	12584	27.4	13	1N		C	0017	.56	3.78		61	EG
VORO	03	0013	0049D	0032	S18	W89	1.000	12584	27.3	36D	2F		C	0032	1.75	11.88		71	EK
MANI	03	0014E	0100	0034U	S13	W82	.993	12584	27.9	46D	2B			0034	2.58	6.90			F
MANI	03	0014E	0100	0014U	S13	W82	.993	12584	27.9	46D	1N	1		0014	1.24	3.31			F
CULG	03	0035E	0101	0037	S20	W85	.998	12584	27.6	26D	1N		P	0037	.57				
	03	1516	1522	NO FLARE PATROL															
	03	1537	1544	NO FLARE PATROL															
	03	2006	2012	NO FLARE PATROL															
	03	2013	2026	NO FLARE PATROL															
	03	2108	2115	NO FLARE PATROL															
	03	2121	2241	NO FLARE PATROL															
031 ATHN	04	0954	1009D	0958	S14	W90	1.000	12584	28.7	15D	1B	2	C						DE 4
	04	2032	2043	NO FLARE PATROL															
	04	2104	2120	NO FLARE PATROL															
	04	2129	2134	NO FLARE PATROL															
	04	2149	2211	NO FLARE PATROL															
	05	1330	1340	NO FLARE PATROL															
	05	1355	1401	NO FLARE PATROL															
	05	1715	1727	NO FLARE PATROL															
	05	2200	2250	NO FLARE PATROL															
	06	0251	0436	NO FLARE PATROL															
	06	0437	0455	NO FLARE PATROL															
032 TEHR	06	0455E	0550	0455U	S10	W60	.878	12592	1.7	55D	--F	3	V		.91				F R 1
033 CRCN	06	0455E	0530D	0506	N18	W69	.933	12590	1.0	35D	1F			0505	1.00				2
	06	1715	1806	NO FLARE PATROL															
	06	1819	1845	NO FLARE PATROL															
	06	1852	2117	NO FLARE PATROL															

SOLAR FLARES
Confirmed

NOVEMBER 1973

OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IM-POR-TANCE	OBS.		MEASUREMENTS					REMARKS
	DATE NOV	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hg.	MAX. INT. %	
	06	2152	2231	NO FLARE PATROL															
	06	2235	2245	NO FLARE PATROL															
GRP50034	07	1540	1626	1546	N17	E78	.976	12609	13.5	46	--F				.13				2 1 1 4
BOUL	07	1540	1626D	1546	N17	E78	.976	12609	13.5	46D	-F		V	1546		1.30			
RAMY	07	1555	1620	1559	N17	E77	.972	12609	13.4	25	-F	4	C		.13				DE
	07	1913	1916	NO FLARE PATROL															
	07	1941	1947	NO FLARE PATROL															
	07	1953	2012	NO FLARE PATROL															
	07	2014	2111	NO FLARE PATROL															
	07	2143	2149	NO FLARE PATROL															
	08	1949	1954	NO FLARE PATROL															
	08	2000	2011	NO FLARE PATROL															
	08	2015	2019	NO FLARE PATROL															
	08	2239	2245	NO FLARE PATROL															
	08	2316	2321	NO FLARE PATROL															
	09	1917	1926	NO FLARE PATROL															
	09	1932	1940	NO FLARE PATROL															
	10	1916	2004	NO FLARE PATROL															
	10	2021	2024	NO FLARE PATROL															
	10	2028	2034	NO FLARE PATROL															
	10	2039	2054	NO FLARE PATROL															
	10	2116	2124	NO FLARE PATROL															
	10	2125	2132	NO FLARE PATROL															
	10	2137	2146	NO FLARE PATROL															
	11	2049	2054	NO FLARE PATROL															
	11	2132	2218	NO FLARE PATROL															
037 KODA	13	0420E	0440D		N13	E75	.965	12618	18.8	20D	1F		P	0440	4.98	5.00			D 3
041 CATA	13	1135	1150	1145	N14	E74	.960	12618	19.0	15	-N	3		1145	.58			(200)	2
042 CATA	13	1315	1325	1320	N15	E73	.955	12618	19.0	10	--N	3		1320	.29			(182)	2
	13	1630	1701	NO FLARE PATROL															
	14	1510	1543	NO FLARE PATROL															
	14	1614	1626	NO FLARE PATROL															
	14	1627	1712	NO FLARE PATROL															
GRP50047	15	0856	0927	0859	N15	E50	.774	12618	19.1	31	--N				.37				3 3 3 8
BUCA	15	0855E	0940D		N14	E49	.762	12618	19.0	45D	-N		P	0902	.55	.80			D
MONT	15	0857	0926	0859	N15	E50	.774	12618	19.1	29	-N		C	0859	.21				D
CRON	15	0859E	0914		N15	E50	.774	12618	19.1	15D	-F		V		.36				
048 CATA	15	1315	1355	1320	N16	E56	.835	12623	19.8	40	--N	3		1320	.29	.54		(195)	2
049 HUAN	16	1607	1615	1610	N14	E33	.566	12618	19.1	8	--F	1	C	1610	.36	.44			E 2
050 MANI	17	0000	0011	0003	N03	E41	.655	12618	20.1	11	--F	2		0003	.52	.68			2
	17	1534	1545	NO FLARE PATROL															
	18	1603	1633	NO FLARE PATROL															

SOLAR FLARES
Confirmed

NOVEMBER 1973

OBSERV-ATORY	OBSERVED UT				LOCATION						DURA-TION	IM-POR-TANCE	OBS.		MEASUREMENTS					REMARKS
	DATE NOV	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY		MIN.		CONO.	TYPE	TIME UT	MEAS. AREA Ms. Deg.	CORR. AREA Ms. Deg.	MAX. WIDTH Hg.	MAX. INT. %	
GRPS0055	18	1857	1925	1905	S10	E69	.939	12624	24.0		28	--F				.34				3 3 3 3
RAMY	18	1855	1923	1900	S10	E69	.939	12624	24.0		28	-N	3	V		.46				DE
HUAN	18	1858	1919	1903U	S10	E70	.944	12624	24.0		21	-F	1	C	1903	.36				E
BOUL	18	1859E	1932D	1911	S11	E67	.927	12624	23.8		33D	-F		C	1911	.21	.54			
GRPS0056	19	0527	0547	0534	S12	E65	.915	12624	24.1		20	-N				1.20				5 5 5 6
KODA	19	0520E	0540D		S11	E65	.914	12624	24.1		20D	-N		C	0534	3.30	3.38			D
MITK	19	0527	0544	0531	S11	E66	.920	12624	24.2		17	-N		C	0531	.83				EG
CRON	19	0533	0542		S13	E65	.916	12624	24.1		9	-F		V	0535	.41				
MANI	19	0536E	0551	0536U	S12	E65	.915	12624	24.1		15D	-N	2		0536	.93	1.89			F
TEHR	19	0536E	0550D	0536U	S15	E62	.897	12624	23.9		14D	-F	3	V		.52				F
TEHR	19	0536E	0550D	0536U	S15	E62	.897	12624	23.9		14D	-F	3	V		.52				F
GRPS0057	19	1253	1309	1256	S12	E61	.885	12624	24.1		16	--F				.34				2 2 2 4
RAMY	19	1253E	1312	1256	S12	E61	.885	12624	24.1		19D	-F	4	V		.46				DE
HUAN	19	1254E	1306		S11	E60	.876	12624	24.0		12D	-F	1	P	1254	.21	.45			D
	19	1904	1919	NO FLARE PATROL																
	19	1928	1944	NO FLARE PATROL																
	19	1949	2030	NO FLARE PATROL																
	19	2033	2036	NO FLARE PATROL																
	19	2043	2056	NO FLARE PATROL																
	19	2201	2207	NO FLARE PATROL																
	19	2213	2220	NO FLARE PATROL																
GRPS0058	20	1224	1251	1229	S12	E49	.774	12624	24.2		27	-N				.75				2 2 2 4
MEUD	20	1223	1247	1227	S15	E48	.772	12624	24.1		24	-N		C	1227	.62	.90			E
CATA	20	1225	1255	1230	S08	E49	.765	12624	24.2		30	-N	3		1230	.87	1.33		(174)	
059 BOUL	20	1559	1618	1608	S11	E45	.728	12624	24.0		19	--F		C	1608	.11	.15			2
	20	1916	1936	NO FLARE PATROL																
GRPS0061	21	0730	0800	0730	S08	E90	1.000	12628	28.1		30	1N				.58				2 1 1 7
CATA	21	0730E	0800D	0730	S08	E90	1.000	12628	28.1		30D	1N	3		0730	.58			(158)	
MONT	21	0758	0808	0800	S10	E90	1.000	12628	28.1		10	-N		C	0800	.21				
	21	2230	2233	NO FLARE PATROL																
	21	2237	2305	NO FLARE PATROL																
	21	2335	2340	NO FLARE PATROL																
GRPS0062	22	0047	0124	0110	S12	E82	.992	12628	28.2		37	-F				.98				2 2 2 2
MITK	22	0047	0122	0110	S11	E85	.997	12628	28.4		35	1N		C	0110	1.55				D
CRON	22	0111E	0126D		S12	E79	.984	12628	28.0		15D	-F		V		.41				
GRPS0063	22	0212	0238	0221	S12	E81	.989	12628	28.2		26	-N				.93				3 2 2 3
MITK	22	0212	0245	0221	S11	E83	.994	12628	28.3		33	1N		C	0221	1.44				D
CRON	22	0220E	0230		S12	E78	.981	12628	27.9		10D	-N		V		.41				
KODA	22	0225	0335	0225	S14	E70	.946	12628	27.4		70	-F		V	0225			1.92		D
069 RAMY	22	1209	1226	1220U	S11	E71	.950	12628	27.8		17	--F	3	C		.31				DE 4
GRPS0075	23	0731	0744	0737	S12	E59	.868	12628	27.7		13	--F				.43				2 2 2 4
ATHN	23	0731E	0742	0732	S12	E58	.860	12628	27.7		11D	-N	3	V		.33				DE
MANI	23	0742E	0745D	0742U	S11	E60	.875	12628	27.8		3D	-F	2		0742	.52	.97			F
GRPS0079	23	0927	0939	0928	S13	E80	.987	12634	29.4		12	--F				.44				2 2 2 5
ATHN	23	0927E	0941	0927U	S13	E78	.981	12634	29.2		14D	-F	3	V		.66				F
MONT	23	0927	0936	0929	S12	E81	.989	12634	29.5		9	-N		C	0929	.21				D
GRPS0080	23	0944	0954	0945	S09	E55	.828	12628	27.5		10	-N				1.02				3 3 3 3
MONT	23	0941	0951	0944	S09	E55	.828	12628	27.5		10	-N		C	0944	2.06				H
CATA	23	0945	0955	0945	S09	E54	.818	12628	27.5		10	-N	3		0945	.58	.99		(186)	H
CRON	23	0945E	0955		S10	E56	.839	12628	27.6		10D	-F		V		.41				
081 MONT	23	0959	1019	1010	S12	E55	.833	12628	27.5		20	--N		C	1010	.41				4
	23	1549	1557	NO FLARE PATROL																
	23	1605	1614	NO FLARE PATROL																

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS					REMARKS
	DATE NOV	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT %	
GRPS0082	23	1705	1712	1707	S13	E58	.861	12628	28.1	7	-N				.54				3 3 3 3
RAMY	23	1705	1712D	1707	S12	E57	.851	12628	28.0	7D	-N	4	C		.46				DE
MCMA	23	1705	1711	1708	S12	E58	.860	12628	28.1	6	-N		C	1708	.52	1.10			D
BOUL	23	1705	1714	1707	S15	E59	.873	12628	28.1	9	-F		C	1707	.64	1.24			
083 RAMY	23	1834	1838	1836	S13	E54	.825	12628	27.8	4	--F	3	C		.28				DE 3
084 BOUL	23	1922	1950	1927	S13	E75	.970	12634	29.4	28	--F		C	1928	.32	.97			2
085 BOUL	23	2212	2224	2215	S14	E57	.854	12628	28.2	12	--F		C	2215	.64	1.16			3
087 MANI	24	0003E	0012	0003U	S13	E54	.825	12628	28.1	9D	--N	2		0003	.41	.71			FH 2
088 MANI	24	0029E	0045	0029U	S13	E55	.834	12628	28.1	16D	--N	2		0029	.31	.53			2
089 MANI	24	0031	0048	0035	S14	E16	.381	12625	25.2	17	--N	2		0035	.83	.90			FH 2
GRPS0091	24	1549	1620	1553	S10	E46	.735	12628	28.1	31	--F				.51				2 2 2 3
RAMY	24	1546	1608D	1550	S10	E44	.712	12628	28.0	22D	-F	3	C		.19				DE
CANR	24	1552	1620	1555	S09	E47	.744	12628	28.2	28	-F		V		.83				
GRPS0092	24	2000	2030	2011	S13	E41	.686	12628	27.9	30	--N				.83				3 3 3 3
PALE	24	2000	2024	2005	S13	E41	.686	12628	27.9	24	-N	2	C		.81				F
HUAN	24	2007E	2017D		S12	E42	.694	12628	28.0	10D	-N	1	P	2008	.46	.65			
RAMY	24	2017E	2035	2017U	S13	E40	.674	12628	27.8	18D	-F	2	C		1.21				F
GRPS0096	25	0421	0433	0424	S11	E31	.549	12628	27.5	12	-N				.90				2 2 2 3
TEHR	25	0420	0433	0424	S11	E32	.563	12628	27.6	13	-N	3	V		.55				F H
MANI	25	0422	0428D	0424	S11	E30	.536	12628	27.4	6D	-N	2		0424	1.24	1.48			H
GRPS0097	25	0437	0459	0442	S10	E38	.637	12628	28.0	22	--N				.68				2 2 2 2
CRON	25	0437E	0456	0441	S10	E38	.637	12628	28.0	19D	-N		V		.72				
TEHR	25	0442E	0502C	0442U	S10	E37	.624	12628	28.0	20D	-N	3	V		.63				F
GRPS0100	25	0853	0916	0855	S11	E33	.576	12628	27.8	23	-N				1.15				4 4 4 5
BUCA	25	0851E	0918D		S12	E32	.568	12628	27.8	27D	-N		C	0854	1.66	2.00			E
CRON	25	0851	0913	0854	S11	E35	.602	12628	28.0	22	-N		V		.83				
CRON	25	0851	0913	0906	S11	E35	.602	12628	28.0	22	-N				.62				
TEHR	25	0855E	0913	0855U	S10	E32	.558	12628	27.8	18D	-N	3	V		.66				F
CATA	25	0855	0920	0855	S12	E32	.568	12628	27.8	25	-B	3		0855	1.44	1.73		(229)	H
102 RAMY	25	1427E	1441	1428	S10	E25	.462	12628	27.5	14D	-N	3	C		1.11				F H 2
GRPS0103	25	1455	1518	1502	S12	E24	.461	12628	27.4	23	-N				1.44				4 4 4 4
CATA	25	1450	1515D	1500	S12	E24	.461	12628	27.4	25D	1B	3		1500	2.90	3.21		(209)	
BOUL	25	1451	1525	1503	S13	E23	.456	12628	27.3	34	-N		C	1503	1.18	1.28			
RAMY	25	1455	1518	1456	S10	E25	.462	12628	27.5	23	-N	3	C		.84				F H
CANR	25	1505	1515	1508	S11	E25	.468	12628	27.5	10	-F		V	1508	.83				
104 PALE	25	2049	2054	2051	S14	E29	.541	12628	28.0	5	--F	3	C		.27				F 3
105 PALE	25	2144E	2147	2144	S10	E20	.392	12628	27.4	3D	--N	3	C		.36				F 2
	25	2209	2243	NO FLARE PATROL															
GRPS0106	25	2308	2323	2314	S11	E22	.427	12628	27.6	15	--N				.83				2 2 2 2
MANI	25	2250E	2310	2255	S10	E28	.503	12628	28.1	20D	-F	1		2255	.83	.95			F
MANI	25	2308E	2322	2314	S10	E20	.392	12628	27.5	14D	-N	1		2314	1.03	1.12			
PALE	25	2313E	2323D	2313U	S12	E19	.396	12628	27.4	10D	-N	2	C		.63				DE
107 VORO	25	2345	0015	2350	S09	E19	.370	12628	27.4	30	--B		C	2350	.84	.90		64	EHJ 4
GRPS0109	26	0024	0035	0027	S09	E18	.355	12628	27.4	11	--N				.68				4 4 4 5
PALE	26	0023	0032	0026	S10	E18	.363	12628	27.4	9	-N	2	C		.36				H F
MITK	26	0023	0040	0026	S10	E18	.363	12628	27.4	17	-N		C	0026	.52	.60			DH
MANI	26	0025E	0034	0026	S09	E19	.369	12628	27.4	9D	-N	2		0026	.72	.77			H
VORO	26	0025	0035	0029	S08	E18	.347	12628	27.4	10	-B		C	0029	1.11	1.20		73	EHJ
GRPS0110	26	0104	0121	0110	S08	E19	.362	12628	27.5	17	-N				1.20				3 3 3 5
MANI	26	0102	0121	0111	S09	E19	.369	12628	27.5	19	-N	2		0111	1.24	1.32			H
MITK	26	0103	0115D	0107	S08	E20	.376	12628	27.5	12D	-N		C	0107	1.44	1.60			DH
VORO	26	0107	0120	0111	S08	E19	.362	12628	27.5	13	-B		C	0111	.93	1.00		73	EHJ
GRPS0112	26	0436	0517	0442	S11	W26	.481	12624	24.2	41	--N				.77				4 4 4 4
TEHR	26	0435	0510D	0445	S11	W24	.453	12624	24.4	35D	-N	3	V		.41				F
CRON	26	0435	0517	0438	S10	W27	.489	12624	24.2	42	-N		V	0438	.62				
MITK	26	0437	0515D	0447	S12	W26	.487	12624	24.2	38D	-N		C	0447	1.13	1.20			E
MANI	26	0438E	0443D	0438U	S12	W26	.487	12624	24.2	5D	-N	2		0438	.93	1.05			F

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OBSERVATORY	OBSERVED UT				LOCATION						DURATION	IMPORTANCE	OBS. COND.	OBS. TYPE	MEASUREMENTS					REMARKS
	DATE NOV	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MONATH PLAGE REGION	CMP DAY		MIN.				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
GRPS0114	26	0552	0605	0556	S08	E17	.333	12628	27.5		13	1B				1.57				5 5 5 6
MANI	26	0552E	0555D	0552U	S08	E17	.333	12628	27.5		3D	1B	2		0552	2.58	2.62			E
CRON	26	0554E	0603D	0557U	S08	E17	.333	12628	27.5		9D	-B		V	0557	1.03				
TEHR	26	0555E	0605C	0559U	S06	E19	.349	12628	27.7		10D	-N	3	V		.31				F
ATHN	26	0555E	0609	0555U	S11	E17	.359	12628	27.5		14D	1B	1	V		2.15				F
ABST	26	0558E	0603	0558	S08	E15	.385	12628	27.4		5D	1N		P	0558	1.80	1.80			BE
GRPS0115	26	0705	0713	0707	S09	E16	.327	12628	27.5		8	-N				1.01				6 6 6 6
ABST	26	0704	0712	0705	S08	E15	.305	12628	27.4		8	1N		C	0705	1.80	1.80		92	E
TEHR	26	0704	0714	0706	S07	E19	.355	12628	27.7		10	-N	3	C		.73				F
CATA	26	0705	0715	0705	S09	E15	.314	12628	27.4		10	-B	3		0705	.87	.90		(295)	H
ATHN	26	0705E	0715	0707	S11	E15	.334	12628	27.4		10D	-B	2	V		1.49				U F
CRON	26	0708E	0712	0708E	S09	E15	.314	12628	27.4		4D	-N		V	0708	.62				
MANI	26	0712E	0712D	0712U	S08	E16	.319	12628	27.5			-N	2		0712	.52	.52			
GRPS0121	26	1102	1114	1105	S08	E13	.277	12628	27.4		12	--N				.92				3 3 3 4
CATA	26	1100	1115	1105	S09	E14	.300	12628	27.5		15	-B	3		1105	.87	.90		(240)	
TEHR	26	1103E	1112	1106	S07	E11	.240	12628	27.3		9D	-N	4	V		.66				F
CANR	26	1103	1115	1105	S09	E15	.314	12628	27.6		12	-N		V	1105	1.24	1.20			
GRPS0122	26	1146	1155	1149	S09	E12	.275	12628	27.4		9	--N				.57				3 3 3 5
CANR	26	1146	1156	1149	S09	E12	.275	12628	27.4		10	-B		V	1149	.83	.80			
MEUD	26	1148E	1153	1148	S10	E12	.286	12628	27.4		5D	-N		C	1148	.62	.60			C
TEHR	26	1150E	1157	1151	S08	E11	.251	12628	27.3		7D	-N	2	V		.25				F
4 STATIONS REPORTING GROUP 50123. 0 STATIONS OBSERVING AND NOT REPORTING.																				
GRPS0123	26	1339	1401	1349	S09	E11	.262	12628	27.4		22	1N				2.34				4 4 4 4
ATHN	26	1332	1401	1348	S09	E11	.262	12628	27.4		29	1B	2	C		2.31				F
CANR	26	1337	1400	1349	S08	E11	.251	12628	27.4		23	1N		V		3.30				
MEUD	26	1347	1357	1349	S09	E12	.275	12628	27.5		10	1N		C	1349	2.27	2.30			E
MERS	26	1348E	1405	1348	S08	E11	.251	12628	27.4		17D	-N		S	1348	1.48	1.60			E
50123	26	1332	1401	1340	S08	E12	.264	12628	27.5		29	*-N				.91				3 3 3 3
ATHN	26	1332	1401	1338	S09	E11	.262	12628	27.4		29	-N	2	C		.99				F
CANR	26	1337	1400	1341	S08	E11	.251	12628	27.4		23	-N		V		1.03				
MEUD	26	1340E	1345		S08	E13	.277	12628	27.5		5D	-F		C	1341	.72	.70			CE
GRPS0124	26	1426	1438	1429	S08	E12	.264	12628	27.5		12	--N				.79				2 2 2 4
CANR	26	1425	1436	1428	S08	E11	.251	12628	27.4		11	-N		V		.83				
RAMY	26	1427	1440	1429	S07	E12	.254	12628	27.5		13	-N	3	C		.74				DE
GRPS0125	26	1520	1541	1525	S07	E10	.227	12628	27.4		21	1B				2.78				1 1 1 1
RAMY	26	1520E	1541	1525	S07	E10	.227	12628	27.4		21D	1B	3	C		2.78				F H
RAMY	26	1520E	1541	1523	S07	E10	.227	12628	27.4		21D	-B	3	C		1.49				F H
126 RAMY	26	1540E	1600	1553	S07	E13	.268	12628	27.6		12D	--F	3	V		.46				DE 1
127 PALE	26	1755E	1826	1801U	S13	W75	.969	12626	21.1		31D	--F	1	C		.72				F 2
128 RAMY	26	1954	1956D	1956U	S06	E18	.217	12628	27.6		2D	--F	2	V		.46				DE 2
	26	2115	2135	NO FLARE PATROL																
	26	2203	2231	NO FLARE PATROL																
	26	2233	2258	NO FLARE PATROL																
129 PALE	26	2308E	2308D	2308U	S08	E07	.205	12628	27.5			-N	2	C		1.80				F 2
130 PALE	26	2332E	2340D	2333	S08	E07	.205	12628	27.5		8D	-N	2	C		.99				F 2
GRPS0133	27	0124	0138	0127	S09	E05	.200	12628	27.4		14	--N				.88				4 4 4 5
MITK	27	0124	0130	0125	S08	E05	.185	12628	27.4		14	-N		C	0125	.93	.90			E
CRON	27	0124E	0137		S08	E06	.193	12628	27.5		13D	-N		V		.72				
PALE	27	0124E	0140	0126U	S09	E04	.193	12628	27.4		16D	-N	1	V		1.03				F
MANI	27	0130E	0138	0130U	S10	E05	.216	12628	27.4		8D	-N	1		0130	.83	.83			F
PALE	27	0135E	0136D	0135U	S09	E04	.193	12628	27.4		1D	-N	1	C		.99				F
GRPS0135	27	0306	0324	0313	S07	E03	.155	12628	27.4		18	-B				1.84				6 6 5 6
MITK	27	0303	0325	0313	S08	E03	.171	12628	27.4		22	-N		C	0313	1.34	1.30			DH
CRON	27	0306	0329	0313	S07	E04	.162	12628	27.4		23	-B		V		1.03				
KODA	27	0309	0322	0311	S04	E04	.117	12628	27.4		13	1N		V	0315			1.72		DHL
MANI	27	0310E	0314D	0312	S08	E03	.171	12628	27.4		4D	1B	1		0312	3.09	3.12			E
PALE	27	0312E	0322D	0314U	S08	E02	.167	12628	27.3		10D	1N	2	V		2.37				U F
VORO	27	0313E	0324		S08	E02	.167	12628	27.3		11D	-B		P	0313	1.38	1.40		93	EHJ

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	DATE NOV	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH HG	MAX. INT. %	
GRP50138	27	0730	0800	0752	S14	W87	.999	12626	20.8	30	--F		C		.56				4 4 4 8
ABST	27	0730	0802	0750	S14	W88	1.000	12626	20.7	32	1F		C	0750	.90			85	AOK
CRON	27	0748E	0800		S13	W82	.992	12626	21.2	12D	-F		V		.41				
ATHN	27	0749E	0759	0751	S13	W86	.998	12626	20.9	10D	-F	1	V		.33				DE
CATA	27	0750E	0800D	0755	S14	W90	1.000	12626	20.6	10D	1N	3		0755	.58			(155)	
	27	1786	1721	NO FLARE PATROL															
140 BOUL	27	1813	1851	1823	N06	W28	.474	12636	25.7	38	--F		C	1823	.86	.97			1
GRP50143	28	0005	0023	0009	S12	W51	.792	12624	24.2	18	-B				.65				2 2 1 3
VORO	28	0005	0015	0009	S13	W50	.784	12624	24.3	10	-B		C	0009	.65	1.00		65	EJ
CRON	28	0005	0030		S11	W52	.800	12624	24.1	25	-N		V						
GRP50146	28	0533	0555	0539	S09	W04	.191	12628	27.9	22	--F				.52				2 2 2 6
TEHR	28	0531E	0600	0540	S09	W05	.198	12628	27.9	29D	-F	3	C		.31				H
MITK	28	0534	0550	0538	S07	W02	.148	12628	28.1	16	-F		C	0538	.72	.70			D
MITK	28	0600	0632	0603	S09	W03	.186	12628	28.0	32	-N		C	0603	1.44	1.50			E
150 HUAN	28	1628	1640	1633	S06	W12	.242	12628	27.8	12	--N	2	C	1633	.36	.37			3
GRP50151	29	0445	0511	0449	S09	W19	.366	12628	27.8	26	--F				.96				4 3 3 5
MITK	29	0445	0507	0449	S08	W20	.374	12628	27.7	22	-N		C	0449	1.44	1.60			E
CRON	29	0445E	0505	0445E	S09	W19	.366	12628	27.8	20D	-F		V	0445	.83				
TEHR	29	0445E	0520D	0452U	S09	W19	.366	12628	27.8	35D	-F	2	C		.60				F
MANI	29	0456E	0504D	0500U	S07	W20	.367	12628	27.7	8D	-N	1		0500	.62	.67			
GRP50152	29	0646	0752	0700	S09	W19	.366	12628	27.9	66	--B				.46				2 1 1 5
TEHR	29	0646	0752D	0700	S09	W19	.366	12628	27.9	66D	-B	3	C		.46				DE
CATA	29	0720E	0745D	0725	S10	W19	.374	12628	27.9	25D	-N	3		0725	.29	.30		(178)	
	29	1942	1949	NO FLARE PATROL															
	29	1952	1954	NO FLARE PATROL															
GRP50153	30	0227	0235	0227	S08	W31	.533	12628	27.8	8	--N				.74				3 3 3 4
MITK	30	0226	0242	0227	S08	W33	.561	12628	27.6	16	-N		C	0227	.72	.90			D
CRON	30	0227E	0232		S08	W29	.504	12628	27.9	5D	-F		V	0227	.77				
VORO	30	0227	0230	0227	S08	W32	.547	12628	27.7	3	-B		C	0227	.74	.90		62	DJ
GRP50154	30	0911	0945	0922	S14	W33	.587	12628	27.9	34	-N				1.07				6 5 5 7
MONT	30	0906	0953	0924	S13	W33	.582	12628	27.9	47	-N		C	0924	1.13				E
CRON	30	0907E	0938	0919	S14	W33	.587	12628	27.9	31D	-N		V	0919	1.19				
CRON	30	0907E	0938	0907U	S14	W33	.587	12628	27.9	31D	-F		V		.31				
TEHR	30	0909	0938	0916	S15	W33	.593	12628	27.9	29	-N	3	C		.55				F
ARCE	30	0915	0945		S14	W33	.587	12628	27.9	30	-B		C	0922	1.14	1.40			
CANR	30	0920	0923D		S15	W31	.568	12628	28.1	3D	-N		V	0923	1.34	1.50			
CATA	30	0930E	0950	0930	S15	W32	.580	12628	28.0	20D	1B	3		0930	1.73	2.09		(229)	
GRP50155	30	1947	2021	1951	S15	W37	.642	12628	28.0	34	-F				1.76				2 2 1 2
RAMY	30	1947	2017	1949	S14	W38	.650	12628	28.0	30	-N	3	C		1.76				F
BOUL	30	1952E	2025D	1953	S15	W36	.630	12628	28.1	33D	-F		V	1953		1.50			
156 RAMY	30	1948	2013	1951	S11	W44	.712	12628	27.5	25	-N	3	C		.19				DE 1

DAILY FLARE INDICES

Date	Flare Index	HR OBS	Date	Flare Index	HR OBS	Date	Flare Index	HR OBS
731101	8.90	22.5	731110	0.00	22.4	731122	9.63	24.0
731102	0.00	21.5	731111	0.00	23.1	731123	7.03	23.7
731103	14.33	22.0	731113	133.69	23.5	731125	28.92	23.4
731104	7.64	23.1	731114	0.00	22.5	731126	118.86	22.8
731105	0.00	22.7	731117	0.00	23.8	731127	17.87	23.8
731106	6.13	17.4	731118	0.00	23.5	731128	2.23	24.0
731107	0.00	22.5	731119	7.73	22.2	731129	0.00	23.9
731108	0.00	23.5	731120	2.97	23.7	731130	22.58	24.0
731109	0.00	23.7	731121	1.78	23.4			

When no Flare Index is given, it is 0 for that day.

Addenda: The Flare Index for October 31, 1973 should read 0.00. Hrs. of Patrol = 20.7.

SOLAR FLARES
Unconfirmed
NOVEMBER 1973

OBSERV-ATORY	OBSERVED UT: DATE NOV	START	END	MAX. PHASE	LOCATION: APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	OBS. TYPE	MEASUREMENTS: TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH ±0	MAX. INT. %	REMARKS
024 CANR	01	1136	1145	1137	S10	W51	.797	12584	28.7	9	-F		V		.31				5
027 CRON	02	0200	0222	0208	S14	W58	.869	12584	28.7	22	-N		V		1.03				4
028 CANR	02	0908	0914D	0912	S13	W60	.883	12584	28.9	6D	-N		V	0912	.62	1.20			4
035 ATHN	12	1015	1029	1018	N15	E90	1.000	12618	19.2	14	-F	2	C						DE 4
036 CATA	12	1230E	1240D	1235	N18	E90	1.000	12618	19.3	10D	1F	3		1235	.58			(148)	4
038 MITK	13	0622	0630	0626	N15	E80	.983	12618	19.3	8	-N		C	0626	.52				DH 5
039 CATA	13	0840	0845	0840	N15	E78	.977	12618	19.2	5	-N	1		0840	.29			(182)	6
040 MONT	13	0935	0943	0939	N14	E78	.977	12618	19.2	8	-N		C	0938	.41				DH 6
043 CRON	14	0212E	0215	0212U	N13	E68	.927	12618	19.2	3D	-F		V	0212	.36				4
GRPS 0044	14	0318	0401	0322	N14	E66	.914	12618	19.1	43	-N				1.69				1 1 1 6
KODA	14	0318	0401D	0322	N14	E66	.914	12618	19.1	43D	-N		V	0322	1.69				D
KODA	14	0318	0401D	0322	N14	E66	.914	12618	19.1	43D	-N		V	0322			1.64		D
045 MANI	15	0516	0524D	0520U	N15	E49	.763	12618	18.9	8D	-F	2		0520	.21	.32			3
046 ATHN	15	0826E	0833	0828	N13	E48	.749	12618	19.0	7D	-F	3	V		.33				DE 7
051 MANI	18	0341	0404	0342	N13	E13	.286	12618	19.1	23	-F	2		0342	.31	.32			F 5
052 TEHR	18	0522E	0533D	0523	N19	E32	.579	12623	20.6	11D	-F	3	V		.25				F 5
053 MANI	18	0523E	0535	0524U	N24	E41	.708	12623	21.3	12D	-F	2		0524	.62	.89			F 5
054 MANI	18	0548E	0610	0553U	N14	E07	.232	12618	18.8	22D	-F	2		0553	.21	.21			F 6
060 ABST	21	0626E	0638D	0631	S11	E90	1.000	12628	28.0	12D	1F		P	0631	1.17			59	AEK 7
064 KODA	22	0726	0735	0729	S12	E78	.981	12628	28.2	9	-B		V	0729			2.64		D 4
065 CANR	22	0918	0944	0920	S13	E23	.459	12624	24.1	26	-F		V	0920	.41				8
066 MONT	22	0948	1004	0953	S11	E73	.960	12628	27.9	16	-N		C	0953	.41				8
067 MONT	22	1006	1016	1009	S11	E73	.960	12628	27.9	10	-N		C	1009	.21				7
068 MONT	22	1025	1030	1027	S08	E72	.954	12628	27.8	5	-N		C	1027	.21				EW 5
070 RAMY	22	1320E	1330D		S13	E71	.951	12628	27.9	10D	-F	3	V						DE 5
071 BOUL	22	1452E	1520D	1455U	S12	E68	.933	12628	27.7	28D	-F		V	1452		.80			4
072 BOUL	22	2105	2150	2120	S15	E89	1.000	12634	29.6	45	1F		C	2120	.54	2.12			3
073 MANI	22	2315E	2320	2315U	S12	E68	.933	12628	28.1	5D	-N	1		2315	.62	1.32			F 4
074 MANI	23	0658	0701D	0700	S11	E59	.867	12628	27.7	3D	-N	2		0700	.41	.76			X 5
076 MANI	23	0758E	0759D	0759U	S11	E56	.840	12628	27.5	1D	-N	2		0759	.62	1.08			F 5
077 MANI	23	0812E	0817D	0812U	S10	E56	.839	12628	27.5	5D	-N	1		0812	.83	1.44			6
078 MANI	23	0840E	0848D	0840U	S10	E54	.820	12628	27.4	8D	-N	1		0840	.62	1.03			F 5
086 MANI	23	2252E	2320D	2259	S10	E52	.800	12628	27.9	28D	-N	1		2259	.62	1.00			F 3
090 MANI	24	0329E	0411	0336	S13	E52	.806	12628	28.0	42D	-N	2		0336	1.13	1.86			F 3
093 CRON	24	2218E	2222	2218E	S14	E56	.845	12634	29.1	4D	-N		V	2218	.36				3
094 CRON	24	2307E	2316	2307E	S11	E57	.849	12634	29.2	9D	-F		V	2307	.52				3
095 CRON	24	2345	2356D	2353	S13	E53	.815	12634	29.0	11D	-N		V	2353	.83				5
098 CATA	25	0715	0725	0720	S11	E31	.549	12628	27.6	10	-N	3		0720	.29	.34		(166)	6
099 CATA	25	0735	0740D	0735	S12	E31	.555	12628	27.6	5D	-N	3		0735	.58	.68		(186)	6
101 RAMY	25	1258	1328	1305	S15	W59	.872	12626	21.1	22	-N	3	C		.37				DE 4
108 CRON	26	0000	0009		N06	W08	.159	12636	25.4	9	-F		V		.41				6

SOLAR FLARES
Unconfirmed
NOVEMBER 1973

OBSERV-ATORY	DATE NOV	OBSERVED UT START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
111 MANI	26	0152	0207	0156	S09	E18	.355	12628	27.4	15	-N	2		0156	1.24	1.31			H 4
113 MANI	26	0438E	0443D	0438U	S09	E17	.341	12628	27.5	5D	-N	2		0438	.52	.54			FH 4
116 CATA	26	0935	0935D	0935	S08	E14	.291	12628	27.4		-N	3		0935	.58	.60		(191)	8
GRP50117	26	0937	0948	0940	S09	E14	.300	12628	27.5	11	-F				.56				2 2 2 8
CANR	26	0936	0948	0939	S08	E14	.291	12628	27.4	12	-F		V	0939	.62	.60			
ATHN	26	0938	0948	0940	S10	E14	.311	12628	27.5	10	-N	2	C		.50				DE
118 CANR	26	0952	0959	0954	N07	W13	.243	12636	25.4	7	-F		V	0954	.31	.30			8
GRP50119	26	0955	1005	0956	S09	E14	.300	12628	27.5	10	-F				.41				2 2 2 8
CANR	26	0955	1007	0956	S09	E13	.287	12628	27.4	12	-N		V	0956	.41	.40			
CRON	26	0956E	1002	0956E	S09	E14	.300	12628	27.5	6D	-F		V	0956	.41				
120 CANR	26	1100	1107	1102	N07	W14	.259	12636	25.4	7	-N		V	1102	.52	.50			5
131 PALE	27	0001E	0004D	0002U	S10	E04	.209	12628	27.3	3D	-F	2	V		.31				DE 3
132 CRON	27	0104E	0124		N07	W20	.354	12636	25.5	20D	-F		V		.52				3
134 MANI	27	0145E	0152	0147U	N05	W19	.331	12636	25.6	7D	-N	1		0147	.41	.44			5
136 VORO	27	0351	0358	0352	S07	E05	.170	12628	27.5	7	-B		C	0352	.46	.46		66	EJ 5
137 KODA	27	0416	0539	0419	S13	W80	.987	12626	21.2	83	-B		V	0419			2.72		D 5
139 CATA	27	1025	1035	1030	S09	W01	.182	12628	27.4	10	-N	3		1030	.58	.58		(151)	7
141 CRON	27	2309	2318		S09	E07	.217	12628	28.5	9	-F		V		.93				3
142 CRON	27	2330E	2348	2333	S09	E07	.217	12628	28.5	18D	-N		V		.93				3
144 VORO	28	0057	0117	0059	S09	W01	.179	12628	28.0	20	-B		C	0059	1.11	1.10		64	EJ 5
145 VORO	28	0145	0149	0145	S09	W05	.198	12628	27.7	4	-B		C	0145	.74	.70		67	D 6
147 MONT	28	0948	1013	0951	S09	W05	.198	12628	28.0	25	-N		C	0951	.41				E 8
148 MONT	28	1123	1128	1125	N07	W38	.620	12636	25.6	5	-N		C	1125	.10				6
149 MONT	28	1158	1203	1159	N07	W38	.620	12636	25.6	5	-N		C	1159	.10				6

Note:
A line of explanation has been added before each flare event having more than one maxima. The total number of stations reporting some part of the event is given. The number of stations observing at the time of the principal maximum but not reporting the event is given in the second statement. Care should be exercised in utilizing the numbers in the remarks column. The first number is the number of stations reporting the individual maximum, and not the total number of stations reporting some part of the flare event. The last number is the number of stations reporting at the time of the individual maximum and not necessarily the total number of stations observing during the flare event. GRP numbers may appear several times in order to indicate secondary maxima. An asterisk beside an importance indicates a secondary maximum. The word "GRP" has also been omitted to aid in pointing to this condition.
When it is impossible to determine the time of Maximum Phase from the individual reports the time of Area Measurements is used. This time appears in parentheses. For Flares reported by only one station the last 3 digits of the group number appear to the left of the station code.

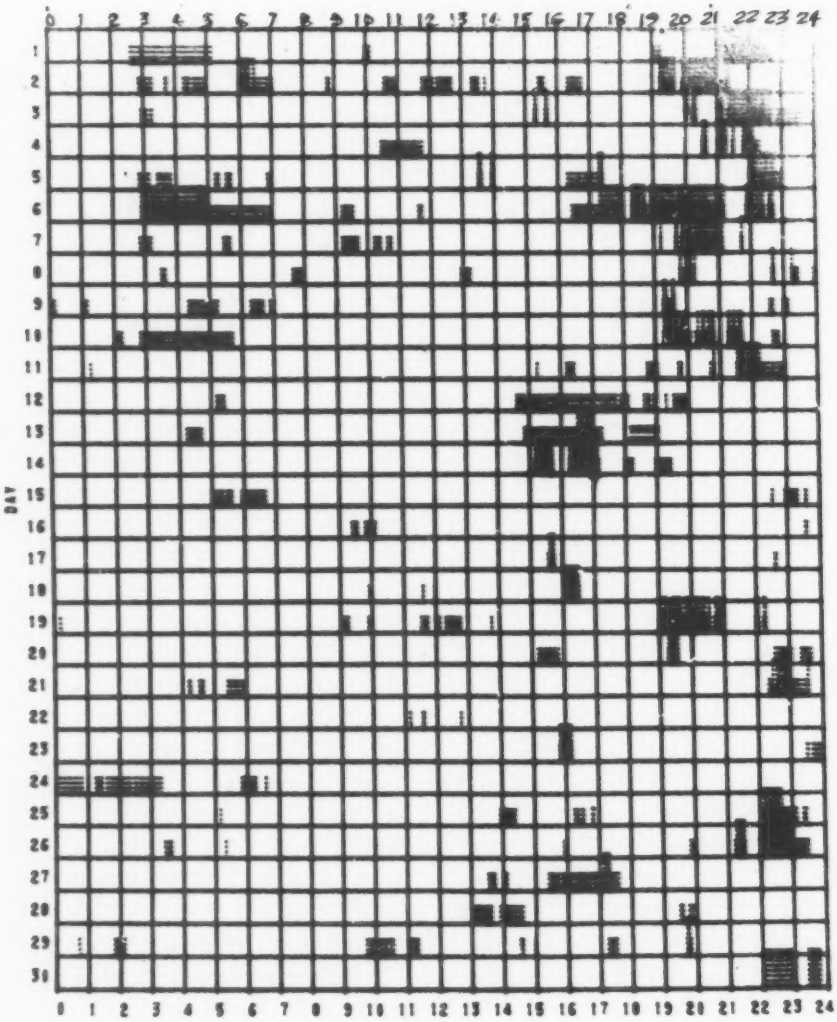
A = Eruptive prominence whose base is less than 90° from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by a high speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the calcium II lines H and K.
P = Flare shows helium D_3 in emission.
Q = Flare shows the Balmer continuum in emission.
R = Marked assymetry in Hα line suggests ejection of high velocity material.
S = Brightness follows disappearance of filament (same position).
T = Region active all day.
U = Two bright branches, parallel (||) or converging (Y).
V = Occurrence of an explosive phase: important and abrupt expansion in about a minute with or without important intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide Hα line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

NOVEMBER 1973

HOUR–UT



Observatories included in total patrol:

Abastumani	Capri F (German)	Herstmonceux	Kodaikanal	Mitaka	Tachkent
Arcetri	Carnarvon	Huancayo	Locarno	Monte Mario	Teheran
Athenes	Catania	Istanboul	Manila	Palehua	Voroshilov
Boulder	Culgoora	Kharkov	McMath-Hulbert	Ramey	Wendelstein
Bucharest	Gran Canaria	Kiev	Meudon		

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

NOVEMBER 1973

NOV. 1973	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
1	200	GORK	44	0700		60		5.0		
	260	ONDR	44	0710	1006.5	440	45.0			
	283	DWIN	44	0725	1013	500	250.0	35.0		
	200	GORK	44	0906		114		5.0		
	3100	CRIM	1	0734	0744	47	9.0	3.0		
	2830	ARCE	20	0738.7	0743.9	26.5				
	1420	CRON	3	0738.5	0743	11	3.0	1.0		
	9240	ARCE	20	0742	0744.6	33				
	930	BORD	5	1128	1129.6	3	6.0	3.0		
	18	MCMA	6	1328	1329	2			1	
	1420	CANR	3	1508	1508.5	1	3.0	1.0		
	245	SGMR	43	1701.6	1841.5	270.4D	36.5			
	410	SGMR	43	1737	1836.2	235 D	77.0			
	245	BOUL	41	1822	1915	108			3	
	2700	PENN	20	1745.2	1855.8	217	23.3	9.5		
	2800	OTTA	21	1750	1940	340 D	11.8			
	2800	OTTA	20	1750	1755	25	2.0	1.0		
	4995	SGMR	22	1845.8	1855.6	80.2	11.6	6.9		
	2695	BOUL	40	1845.5	1855.5	43.5	15.0	3.0		
	1420	BOUL	40	1845	1904.5	59.5	9.0	2.0		
	2695	SGMR	22	1848.8	1855.5	85.9	12.2	7.3		
	1415	SGMR	22	1849.5	1855.7	85.2	7.4	4.4		
	606	SGMR	22	1849.4	1856.3	77.9	59.2	35.5		
	410	SGMR	6	1849	1856.6	64.2	21.7	13.0		
	245	SGMR	6	1849	1915.3	77	61.3	36.8		
	4995	BOUL	3	1854	1855	2	9.0	3.0		
	2800	OTTA	1	1854	1855.5	4	8.4	4.0		
	960	PENN	1	1854.8	1856	2.8	6.7	3.2		
	2695	PENT	1	1904.5	1904.7	2	3.2	0.8		
	2800	OTTA	1	1909	1012.5	7	3.8	1.9		
	2800	OTTA	1	1922	1924	7	3.8	1.9		
2	260	ONDR	41	0710	1253.5	440	30.0			
	221	ABST	3	0828.8	0828.8	45	33.0			
	221	ABST	8	0917.2	0917.8	1	36.0	9.0		
	283	DWIN		1205		200		25.0		
	315	DWIN	4	1206	1348	180	3 15.0	22.0		
	18	MCMA	6	1216	1218	2			1	
	9240	ARCE	3	1431.6	1432	1.5				
	2830	ARCE	1	1431.4	1431.9	1.7				
	245	BOUL	42	1623 E	1644	112 D			3	
	2800	OTTA	26	1720	1720	150	2.4	1.2		
	2695	CANR	3	1735	1736.5	3.5	2.0	1.0		
	2800	OTTA	8	1916	1916.2	.3	10.8	3.9		
	2695	BOUL	8	2310	2310.5	2	28.0	7.0		
	1420	BOUL	8	2310	2310.5	2.5	18.0	5.0		
3	606	MANI	47	0004	0021.5	42	5200.0	880.0		
	1415	MANI	4	0007.4	0013.7	31.9	305.0	74.0		
	2000	TYKW	45	0009	0014.2	31	280.0	70.0		
	4995	MANI	4	0011.6	0016.9	23.7	385.0	94.0		
	4995	CRON	45	0011.5	0017.5	111.5	315.0	69.0		
	2695	MANI	4	0011.5	0018.2	23.8	250.0	106.0		
	1000	TYKW	45	0011	0013.9	35	380.0	40.0		
	500	HIRA	48	0011.5	0121.7	25	1700.0	340.0		
	9400	TYKW	45	0012	0017	28	220.0	75.0		
	8800	MANI	4	0012.4	0018.2	17.3	230.0	94.0		
	2695	CRON	45	0012	0020	103.5	227.0	86.0		
	1420	CRON	45	0012	0015	28.5	192.0	34.0		
	208	VORO	48	0012	0016	25	1580.0	51.0		
	200	HIRA	48	0012.5	0023 U	32	370.0D	240.0D		
	100	HIRA	48	0012	0016 U	36	1000.0D	200.0D		
	9500	HIRA	5	0013.5	0017	26				
	3750	TYKW	45	0014 E	0016.8	26 D	440.0U	140.0		
	8800	MANI	29	0029.7	0029.7	29.9	58.0	15.7		
	4995	MANI	29	0035.3	0035.3	24.3	20.8	7.3		
	2695	MANI	29	0035.3	0035.3	26.2	19.2	5.1		
	9400	TYKW	29	0040		65	40.0	16.0		
	3750	TYKW	29	0040		38 D	30.0U	20.0		
	2000	TYKW	29	0040		55	5.0	2.0		
	260	ONDR	41	0710	1202	450	25.0			
	930	BORD	5	1053	1054.2	3	7.0	3.0		
4	1415	ATHN	2	0935.5	0936.2	8.3	4.7	1.5		
	2800	OTTA	22	1939	1945	20	3.0	1.5		
	4995	BOUL	3	1940	1944	6	7.0	3.0		
	2700	PENN	20	1940.3	1945.4	14	4.6	1.7		
	2695	BOUL	3	1940.5	1945.5	8	4.0	1.0		
5	930	BORD	45	1014	1016.8	4	37.0	4.0		
	18	MCMA	6	1347	1349	2			1	
6	260	ONDR	45	1240	1240.5	1.5	25.0			
	18	MCMA	6	1337	1340	4			1	
7	200	GORK	41	0727.7	0728.1	4.3	50.0			
	200	GORK		0727.7	0730.9		100.0			
	550	KIEV	41	0904.4	0907.1	4	48.0			
	930	BORD	5	1326	1327	8	12.0	4.0		
	930	BORD	5	1343	1345.8	9	14.0	4.0		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

NOVEMBER 1973

NOV. 1973	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
8	260	ONDR	5	1222	1222	.5	20.0			
	260	ONDR	5	1238.5	1238.5	.5	15.0			
	18	MCMA	6	1257	1259.	2			1	
	15400	SGMR	1	1731.7	1732.1	.6	7.7	2.3		
	8800	SGMR	3	1731.8	1732.4	1	12.0	3.6		
	18	MCMA	6	2045	2047	3			1	
9	930	BORD	5	1343	1345	8	13.0	5.0		
	18	MCMA	6	1717	1719	3			1	
10	260	ONDR	5	0815.5	0815.5	.5	40.0			
	2695	BOUL	3	2245.5	2246	1	3.0	1.0		
	1420	BOUL	3	2245	2245.5	1	2.0	1.0		
11	210	IZMI	6	0825.7	0825.8	.5	520.0	175.0		
	260	ONDR	5	1056.5	1056.5	.5	15.0			
	260	ONDR		1131	1131	.5	5 15.0			
	260	ONDR	45	1216.5	1217	.5	20.0			
13	930	BORD	45	1314	1314.6	1	55.0	2.0		
	808	ONDR	5	1314	1314	.5	60.0			
	930	BORD	45	1404	1404.1	1	20.0	2.0		
14	550	KIEV	41	0955.2	0957.4	3	58.0			
	550	KIEV	6	1153.5	1200.2	7.5	100.0			
	29	UPIC	45	1156	1157.5	2.5				
	550	KIEV	41	1222	1225.1	3.5	37.0			
	550	KIEV	41	1238.2	1239.6	1.7	34.0			
	18	MCMA	6	1354	1356	3			1	
	315	DWIN	45	1407	1408	2	5.0	2.0		
	283	DWIN	45	1407	1408	2	5.0	2.0		
15	18	MCMA	6	1345	1346	2			1	
	4995	CRON	3	1433	1434.5	2	5.0	2.0		
	2695	CRON	3	1433	1434.5	2	2.0	1.0		
	1420	CRON	3	1434	1435.5	2.5	2.0	1.0		
16	18	MCMA	6	1240	1242	2			1	
	4995	CANR	45	1734.5	1739.5	6	13.0	4.0		
	2695	CANR	45	1735.5	1740.5	6.5	6.0	2.0		
	1420	CANR	45	1736.5	1737	6.5	3.0	1.0		
17	200	GORK	6	0758.5	0759.2	1.5	150.0			
	100	GORK	6	0758.8	0759.5	1.2	15.0			
	260	ONDR	5	0828.5	0828.5	.5	15.0			
	536	ONDR	5	0839	0839	.5	30.0			
	260	ONDR	5	0839	0839	.5	45.0			
	2695	CANR	3	0900	0902.5	4	3.0	1.0		
	1420	CANR	3	0900	0902.5	4	2.0	1.0		
	4995	CANR	3	0901.5	0902.5	2	8.0	3.0		
18	200	GORK	6	0734.8	0735.7	1.7	100.0	50.0		
	100	GORK	6	0735.3	0735.8	1.3	10.0	5.0		
	2800	OTTA	20	1845	1915	60	1.4	0.7		
19	1420	CANR	3	0745.5	0746.5	1.5	2.0	1.0		
	4995	CANR	3	0746.5	0747.5	1.5	9.0	4.0		
	2695	CANR	3	0746.5	0747.5	2	4.0	1.0		
	2830	ARCE	1	0819	0819.8	1.8				
	2830	ARCE	29	0820.8		35.5				
	650	GORK	1	0917.2	0917.5	.6	2.1	1.0		
	200	GORK	6	0917	0917.4	1.6	200.0	90.0		
	100	GORK	6	0917	0917.5	2	25.0	10.0		
	260	ONDR	5	0940	0940	.5	80.0			
	315	DWIN	45	1252	1253	2	15.0	5.0		
	283	DWIN	45	1252	1252.5	1	15.0	4.0		
	2695	PENT	24	2115	2135	20	1.4	0.6		
20	260	ONDR	5	0910	0910	.5	65.0			
	260	ONDR	5	1146	1146	.5	15.0			
	315	DWIN	45	1216	1216	4	10.0	2.0		
	283	DWIN	45	1216	1221	8	25.0	5.0		
	237	TRST	41	1219	1223.7	7.2	21.0			
	29	UPIC	45	1222	1223	2.5				
	18	MCMA	6	1456	1458	2			1	
	15400	SGMR	1	1829.8	1830.2	.9	7.3	2.2		
	8800	SGMR	1	1829.8	1830.1	1.3	6.4	1.9		
	4995	SGMR	1	1829.7	1830.3	4.7	8.8	2.6		
	4995	BOUL	3	1829	1830	1.5	6.0	2.0		
	2800	OTTA	3	1829.5	1830	6	10.4	2.6		
	2695	SGMR	3	1829.5	1830.3	6	12.0	3.6		
	2695	BOUL	8	1829.5	1830.5	1.5	11.0	4.0		
	1420	BOUL	8	1829	1830	3	5.0	2.0		
	1415	SGMR	1	1829.7	1830.3	9.7	5.1	1.5		
	606	SGMR	1	1829.5	1829.8	9.9	7.4	2.2		
21	2830	ARCE	20	1000.5	1035.6	86 U				
	930	BORD	45	1315	1316.6	4	15.0	5.0		
	18	MCMA	6	1333	1335	3			1	
	18	MCMA	6	1348	1349	2			1	

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NOV. 1973	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
	930	BORD	45	1417	1417.8	1	9.0	2.0		
	930	BORD	40	1555	1555.8	1	9.0	2.0		
	1420	CANR	3	1640.5	1641.5	1.5	2.0	1.0		
22	237	TRST	41	0735.2	0735.5	.8	110.0			
	260	ONDR	45	0915	0915	3	15.0			
	237	TRST	41	0915.4	0915.7	1.8	24.0			
	100	GORK	6	0915.3	0916.2	1.9	60.0	30.0		
	315	DWIN	41	1112	1113	8	20.0	5.0		
	283	DWIN	41	1112	1113	8	25.0	5.0		
	237	TRST	42	1113.8	1113.8	3.2	100.0			
	260	ONDR	45	1114.5	1114.5	7	20.0			
	29	UPIC	5	1114	1114.5	1				
	23	POTS	45	1114	1114.2	.9	7000.0	1000.0		
	18	MCMA	6	1625	1626	2			1	
	18	MCMA	41	2145	2147	2			1	
	208	VORO	44	2300	2259	240	14.5			
23	29	UPIC	45	0739.5	0742	4				
	260	ONDR	41	0740	0942.5	390	205.0			
	315	DWIN	44	0830		420		20.0		
	283	DWIN	44	0830		420		30.0		
	237	TRST	41	0907.4	0907.7	.8	16.0			
	536	ONDR	5	0942.5	0942.5	.5	35.0			
	237	TRST	42	0942.6	0943	2.1	710.0			
	234	POTS	41	0942.7	0942.8	2.1	280.0	7.0		
	210	IZMI	41	0942.8	0942.8	1.8	580.0			
	113	POTS	41	0942.8	0944.4	2.1	700.0	55.0		
	210	IZMI	41	1143.4	1144.6	9.9	400.0			
	536	ONDR	5	1152.5	1152.5	.5	35.0			
	2800	OTTA	26	1430	1430	32	1.6	0.8		
	2800	OTTA	41	1705.5	1709.5	4.5	1.6			
	2800	OTTA	1	1705.5	1705.8	.1	1.2	0.6		
	2800	OTTA	1	1708.5	1709.5	1.5	1.6	0.8		
	2695	PENT	2	2214.2	2215.3	1.8	1.8	0.8		
	500	HIRA	45	2214	2215.1	1.5	390.0	80.0		
	200	HIRA	45	2258.5	2258.8	1.5	170.0	80.0		
	208	VORO	44	2300	2312	240	25.5			
	18	ROUL	6	2310	2312	2			1	
	2695	CRON	45	2346.5	2350	5	13.0	3.0		
	8800	MANI	2	2347.8	2350.8	7.1	7.5	3.0		
	4995	MANI	22	2347.9	2350.7	10.7	6.7	2.0		
	3750	TYKW	45	2347.5	2350.8	5	3.0	1.0		
	2695	MANI	22	2347.9	2350.2	10.7	9.1	1.7		
	2000	TYKW	45	2347.5	2348.6	5	7.0	3.0U		
	1420	CRON	45	2347.5	2348.5	5.5	4.0	1.0		
	1415	MANI	2	2347.9	2348.8	4.7	3.8	.9		
	1000	TYKW	1	2347.5	2348.8	5	2.0	1.0		
	4995	CRON	3	2349	2350.5	2.5	11.0	3.0		
24	200	GORK	44	0600 E		340 D		5.0		
	100	GORK	44	0600 E		340 D		5.0		
	221	ABST	44	0703.5	1045	237	4.0			
	260	ONDR	41	0800	1244.5	380	30.0			
	29	UPIC	5	1200	1200	.5				
	18	MCMA	6	1408	1409	2			1	
	2800	OTTA	20	1545	1549	10	.8	0.4		
	4995	SGMR	22	2002.5	2004.1	13.5	15.5	9.3		
	2800	OTTA	21	2002	2010	30	2.8	1.4		
	2695	SGMR	23	2002.9	2008.1	15.1	4.4	2.6		
	9400	HUAN	2	2003.6	2004.4	2.1	17.2	7.9		
	8800	SGMR	4	2003	2004.3	9	22.6	6.8		
	4995	BOUL	3	2003.5	2004	1.5	11.0	4.0		
	2695	BOUL	8	2003.5	2004.5	2	59.0	21.0		
	2695	PENT	2	2003.2	2003.3	2	6.4	3.1		
	2695	SGMR	4	2003.6	2003.9	1.2	61.8	18.5		
	1420	BOUL	8	2003.5	2004	2	5.0	2.0		
	1415	SGMR	23	2003	2008.5	12	3.0	1.8		
	1415	SGMR	4	2003.5	2003.8	1.1	11.4	3.4		
	208	VORO	44	2300	0057	240	35.0			
25	200	HIRA	45	0055	0055.7	2	170.0	60.0		
	200	GORK	44	0600		300		10.0		
	100	GORK	44	0600 E		300 D		5.0		
	221	ABST	44	0700	0951.5	240	6.0			
	100	GORK	41	0730.4	0739.4	18.9	50.0D			
	100	GORK		0730.4	0743.2		50.0D			
	260	ONDR	44	0800	1159	360	105.0			
	8800	ATHN	4	0851.8	0852.3	2.4	10.4	4.5		
	4995	ATHN	4	0851.9	0852.3	2.3	18.2	5.8		
	2695	CRON	8	0851.5	0852	1.5	12.0	4.0		
	2695	ATHN	1	0851.8	0852.4	2.2	9.5	3.2		
	1415	ATHN	1	0851.8	0852.4	2.1	4.1	1.4		
	9500	BERL	1	0852	0852.5	1	3.8	1.3		
	4995	CANR	8	0852	0852.5	3	20.0	6.0		
	3000	BERL	3	0852	0852.7	3	10.0	2.8		
	2830	ARCE	3	0852.2	0852.7	2.2				
	2695	CANR	8	0852	0853	2.5	14.0	5.0		
	1500	BERL	1	0852	0852.7	1.5	2.4	0.9		
	1420	CANR	8	0852	0753.5	3.5	4.0	1.0		

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NOV. 1973	FREQUENCY STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	REMARKS
	1420 CRON	3	0852.5	0853.5	2	4.0	1.0		
	9100 GORK	1	0853	0853.2	.4	8.5	4.0		
	4995 CRON	8	0853	0853.5	2	17.0	6.0		
	2830 ARCE	29	0854.4		28				
	1420 CRON	3	1025.5	1029	5.5	15.0	5.0		
	2695 CRON	8	1027	1027.5	2.5	25.0	5.0		
	4995 CRON	3	1028	1028.5	2.5	13.0	5.0		
	6100 KISV	45	1035	1035.5	2.4	138.0			
	6100 KISV	45	1152.2	1152.5	1	153.0			
	6100 KISV	45	1204.2	1205.1	1.3	138.0			
	237 TRST	41	1211.4	1211.6	.4	320.0			
	234 POTS	45	1211.6	1211.7	.3	150.0	30.0		
	2800 OTTA	20	1315 E	1340	60 D	3.6			
	234 POTS	45	1348.4	1348.5	.4	250.0	25.0		
	2800 OTTA	22	1417	1424	23	1.2	0.6		
	2800 OTTA	20	1450	1500	20	1.0	0.5		
	2800 OTTA	20	1547	1600	10	1.6	0.6		
	2800 OTTA	27	1558		232	2.4	1.8		
	2800 OTTA	24	1558	1615	17	2.4	1.8		
	2800 OTTA	24	1615		115	2.4			
	2800 OTTA	26	1810	1810	100	2.4	1.2		
	1420 CRON	3	2215.5	2216.5	2	3.0	1.0		
	1420 BOUL	3	2240	2242.5	5.5	3.0	1.0		
	208 VORO	44	2300	2322	240	42.0			
	100 HIRA	45	2350.5	2350.9	1	1000.0D	140.0D		
26	606 MANI	40	0025.2	0027.9	5.6	73.0	6.2		
	1415 MANI	1	0027	0028.2	4.3	3.8	.5		
	500 HIRA	45	0027.3	0028	1	400.0	60.0		
	2000 TYKW	45	0103	0107.7	10	3.0	1.0		
	1415 MANI	2	0106.5	0109.8	8	9.6	1.9		
	606 MANI	40	0106.5	0109.6	14.8	44.2	5.8		
	9400 TYKW	20	0107	0115	30	4.0	2.0		
	4995 MANI	1	0107.2	0107.6	7.3	5.5	.9		
	3750 TYKW	1	0107	0107.6	1	6.0	2.0		
	2695 MANI	1	0107.2	0107.6	2.5	4.5	.9		
	1420 CRON	45	0107	0110	4.5	6.0	2.0		
	1000 TYKW	45	0107	0109.7	6	21.0	2.0		
	500 HIRA	45	0107	0107.8	4	70.0	20.0		
	200 HIRA	45	0107	0107.5U	2	170.0D	100.0D		
	100 HIRA	45	0107	0107.7U	2.5	1000.0D	160.0D		
	3750 TYKW	29	0108		30	2.0	1.0		
	200 HIRA	45	0120.5	0120.9U	1.5	170.0D	60.0D		
	200 HIRA	45	0150	0151 U	1.5	170.0D	70.0D		
	9400 TYKW	1	0155.5	0156	1.5	2.0	1.0		
	3750 TYKW	1	0155.5	0156	1.5	2.0	1.0		
	2000 TYKW	1	0155	0156.1	2	2.0	0.7		
	1000 TYKW	1	0155	0156	2	2.0	0.6		
	200 HIRA	45	0228	0229 U	2	160.0D	70.0D		
	606 MANI	40	0432.3	0433.8	7.5	18.4	6.0		
	500 HIRA	45	0433		3.5		10.0		
	500 HIRA		0433	0433.7		40.0			
	500 HIRA		0433	0434.6		37.0			
	1000 TYKW	45	0550	0553.9	14	70.0	7.0		
	606 MANI	40	0550.3	0554.3	11.9	430.0	96.0		
	200 HIRA	45	0550	0551.3U	7.5	170.0D	80.0D		
	100 HIRA	45	0550.5	0552.5	6.5	1000.0D	130.0D		
	8800 ATHN	4	0551.9	0553.9	10.7	17.7	4.8		
	4995 MANI	4	0551.2	0554	10	26.9	6.7		
	4995 CRON	45	0551	0553	10.5	31.0	8.0		
	4995 ATHN	4	0551.8	0553.7	11.3	33.8	9.4		
	2695 CRON	45	0551.5	0554	10	39.0	11.0		
	2695 MANI	4	0551.2	0554	10	47.0	10.4		
	2695 ATHN	4	0551.8	0553.8	10.8	42.8	9.2		
	2000 TYKW	45	0551	0553.9	12	27.0	5.0U		
	1415 MANI	40	0551.1	0554	10.1	26.2	11.5		
	1415 ATHN	4	0551.8	0553.8	10.8	22.8	5.4		
	9400 TYKW	45	0552	0556	13	12.0	5.0		
	3750 TYKW	45	0552	0553.9	12	35.0	6.0		
	1420 CRON	45	0552	0554.5	11	23.0	7.0		
	29 UPIC	5	0659	0659.5	1				
	210 IZMI	44	0700		300	70.0			
	260 ONDR	44	0730		410	240.0D			
	315 DWIN	44	0750		455		30.0		
	283 DWIN	44	0750		455		55.0		
	410 SGMR	43	1400	1838.6	428 D	21.8			
	245 SGMR	43	1400	1509.9	428 D	64.6			
	3100 CRIM	3	0702	0704	5	21.0	7.0		
	4995 ATHN	4	0703.5	0705.6	11.9	15.0	3.8		
	2695 CRON	8	0703.5	0705	4.5	45.0	13.0		
	1415 ATHN	4	0703.7	0705.7	9.9	49.2	9.0		
	606 MANI	40	0703.7	0705.8	8.3	540.0	14.5		
	200 HIRA	45	0703.5	0705.7U	4	100.0D	50.0D		
	9750 IRKU	3	0704	0705.6	18	40.0	8.0		
	8800 ATHN	4	0704.1	0705.6	6.6	27.4	6.4		
	2695 ATHN	4	0704.2	0705.5	9.4	35.2	9.2		
	1420 CRON	8	0704	0706.5	5	46.0	13.0		
	1415 MANI	4	0704	0706	5	41.4	11.5		
	1000 TYKW	45	0704	0706	3	52.0	20.0		
	550 KIEV	6	0704.4	0705.7	2.2	155.0			

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26	510	POTS	45	0704	0706	4 U	84.0	8.0		
	210	IZMI	48	0704	0705.5	5	3600.0	2200.0		
	8800	MANI	4	0705.4	0705.7	3.6	38.2	9.5		
	4995	MANI	4	0705.4	0705.7	3.6	14.9	4.4		
	4995	CRON	3	0705	0705.5	4	13.0	5.0		
	3750	TYKW	1	0705	0705.4	1.3	9.0	4.0		
	2695	MANI	4	0705.4	0705.5	3.6	46.1	4.4		
	2000	TYKW	45	0705	0705.6	2	29.0	7.0		
	100	MIRA	45	0705	0705.6	2.5	500.0D	100.0D		
	29	UPIC	45	0705	0706	3				
	234	POTS	45	0706 E	0706.5	1.5D	250.0			
	113	POTS	45	0759.5	0759.8	.8U	175.0	15.0		
	234	POTS	45	0807	0807.5	1 U	250.0	25.0		
	234	POTS	41	0922.5	0930	1	1600.0	25.0		
	1500	BERL	22	0924.5	0930.2	1	4.4U	0.9		
	113	POTS	41	0924	0930.5	1	3500.0	70.0		
	315	DWIN	41	0928	0937	10	300.0D			
	283	DWIN	41	0928		10	100.0D			
	210	IZMI	48	0929.5	0930.1	1.5	4200.0	1450.0		
	536	ONDR	45	0930	0933.5	10	65.0			
	228	HARS	5	0930	0930.5	1.5	500.0	170.0		
	29	UPIC	45	0930.5	0931	8				
	23	POTS	41	0930	0931	8.5U	5000.0	300.0		
	210	IZMI	48	0931	0931.3	1	2800.0	2000.0		
	808	ONDR	45	0933	0933.5	5	70.0			
	510	POTS	41	0933	0933.5	5.5U	38.0	1.0		
	408	TRST	41	0933.1	0933.5	1	190.0			
	408	TRST	41	0937	0937.5	1.9	100.0			
	283	DWIN	41	0952		8	100.0D			
	1500	BERL	46	0953.5	0956.5	20	7.3	1.9		
	536	ONDR	45	0954.5	0956	11	400.0			
	408	TRST	42	0954.8	0956.4	10	140.0D			
	408	TRST			0959.3		130.0D			
	315	DWIN	41	0954	0956	6	300.0D			
	4995	CANR	3	0955.5	0956.5	1.5	6.0	2.0		
	1420	CANR	45	0955	0956.5	7	7.0	2.0		
	1420	CRON	45	0955.5	0957	7.5	8.0	2.0		
	808	ONDR	45	0955.5	0956.5	5	220.0			
	550	KIEV	6	0955	0956.9	6.2	100.0			
	234	POTS	40	0955.4	0956.4	8.2	900.0	18.0		
	113	POTS	40	0955.6	0956.5	8.2	700.0	30.0		
	29	UPIC	45	0955	0957	5				
	23	POTS	40	0955.5	0955.8	4.5U	5000.0	500.0		
	9500	BERL	1	0956	0956.6	1	5.3	2.1		
	8800	ATHN	1	0956.2	0956.6	1.5	8.1	2.4		
	4995	ATHN	1	0956.1	0956.7	6.9	3.8	.9		
	3100	CRIM	45	0956	0957	6	2.0	1.0		
	3100	CRIM		0956	0959		2.0	1.0		
	3000	BERL	20	0956	0959.5	29	2.3	0.7		
	2695	CANR	45	0956.5	0957.5	5.5	4.0	1.0		
	2695	ATHN	1	0956.4	0956.7	1.3	3.1	.8		
	1415	ATHN	1	0956.2	0956.5	4.9	6.6	1.8		
	510	POTS	40	0956.2	0956.4	4.1	550.0	10.0		
	210	IZMI	48	0956.2	0956.9	1.7	1400.0	860.0		
	29	UPIC	45	1010	1014	7				
	408	TRST	45	1018.4	1018.5	.4	35.0	11.0		
	234	POTS	45	1018.5	1018.5	.1	45.0	9.0		
	536	ONDR	45	1053	1101	16	50.0			
	408	TRST	42	1053.8	1054.4	14.2	80.0D			
	408	TRST		1053.8	1056.3		49.0			
	408	TRST		1053.8	1100.8		83.0D			
	408	TRST		1053.8	1104		86.0D			
	808	ONDR	45	1056	1101	7.5	65.0			
	234	POTS	41	1056.4	1103.9	9.1	500.0	15.0		
	113	POTS	41	1056.4	1104.2	9.3	1400.0	70.0		
	510	POTS	45	1057	1103.9	7.2U	280.0	20.0		
	29	UPIC	45	1057		11				
	283	DWIN	41	1058		6	100.0D			
	3000	BERL	46	1059.5	1104.2	8.5	6.5	1.8		
	2830	ARCE	22	1059.2	1104.3	16 U				RECORD DIST
	8800	ATHN	2	1100.7	1104.2	7.6	9.5	2.4		
	4995	ATHN	4	1100.7	1104.2	10.6	16.4	3.6		
	3100	CRIM	41	1100	1105	10	9.0	3.0		
	2695	CANR	45	1100	1105.5	10.5	10.0	3.0		
	2695	ATHN	2	1100.7	1104.1	7.9	4.5	1.5		
	1500	BERL	46	1100.2	1104.3	7.8	60.0	12.0		
	1415	ATHN	4	1100.6	1104.1	7.7	60.6	6.0		
	550	KIEV	41	1100.2	1104.2	6	236.0			
	315	DWIN	41	1100	1103	5	300.0D			
	1420	CANR	45	1101	1104.5	9	59.0	16.0		
	9500	BERL	1	1103.5	1104	2.5	9.2	3.4		
	4995	CANR	8	1103.5	1104	3.5	18.0	7.0		
	210	IZMI	6	1103.7	1104	2	1000.0	740.0		
	23	POTS	45	1103.2	1104.7	4.2	90000.0	9999.0D		
	4995	CANR	3	1146.5	1147.5	2.5	6.0	2.0		
	3000	BERL	4	1146	1148	4.3	9.0	2.1		
	8800	ATHN	1	1147.6	1148.2	5.4	1.6	.5		
	4995	ATHN	1	1147.6	1148.1	3.6	4.6	1.8		
	3100	CRIM	3	1147	1149	5	11.0	4.0		
	2830	ARCE	3	1147	1148.2	2.4				

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26	2695 ATHN	3	1147.4	1148.1	4.2	19.6	4.5		
	1500 BERL	4	1147	1148.2	4	45.0	7.0		
	1420 CANR	8	1147	1148	4	59.0	13.0		
	1415 ATHN	3	1147.1	1148.1	4.1	57.0	5.4		
	808 ONDR	45	1147	1148	4.5	90.0			
	550 KIEV	6	1147.7	1148.6	2.2	88.0			
	536 ONDR	45	1147	1148	4.5	80.0			
	408 TRST	41	1147	1148.2	2.5	250.0			
	315 DWIN	45	1147	1147	2	300.0D			
	283 DWIN	45	1147		2	100.0D			
	2695 CANR	8	1148	1149	3.5	32.0	11.0		
	8800 ATHN	22	1335.8	1349.2	21.7	11.1	3.2		
	4995 ATHN	22	1335.7	1349.2	24.3	16.4	2.7		
	2800 OTTA	23	1335	1341	27	3.4	1.4		
	2695 ATHN	22	1335.8	1349	20.3	13.6	2.3		
	315 DWIN	41	1335		20	300.0D			
	283 DWIN	41	1335		18	100.0D			
	1415 ATHN	23	1336	1337.7	19.7	6.0	1.8		
	536 ONDR	45	1336.5	1338	5	80.0			
	4995 CANR	45	1337.5	1350	21	19.0	5.0		
	2695 CANR	45	1337	1350.5	24	20.0	4.0		
	960 PENN	45	1337.4	1337.8	.9	12.7	2.8		
	808 ONDR	45	1337	1337.5	2	70.0			
	510 POTS	41	1337.6	1355.7	18	150.0	2.0		
	234 POTS	41	1337.5	1348.8	18	800.0	15.0		
	113 POTS	41	1337.5	1337.7	18	14000.0	140.0		
	23 POTS	45	1339.2	1339.8	2.5	12000.0	120.0		
	960 PENN	45	1340.4	1341.4	1.2	3.2	1.0		
	29 UPIC	45	1340	1348.5	10.5				
	10700 PENN	20	1345.6	1352.4	14.5	9.6	4.4		
	2800 OTTA	4	1345	1350	17	17.6	4.4		
	960 PENN	45	1345.6	1349.7	5	11.1	3.2		
	9400 HUAN	20	1346.8	1350.5	11.8	15.4	6.7		
	3000 BERL	4	1346	1349.5	10	12.0	2.8		
	1500 BERL	4	1346	1348.5	9 U	32.0U	7.0		
	1420 CANR	45	1346	1348.5	14	53.0	8.0		
	536 ONDR	45	1346	1352	10	90.0			
	9500 BERL	20	1347.5	1351	9 U	9.4	3.9		
	4995 SGMR	4	1348.2	1350.1	7	13.1	3.9		
	2830 ARCE	3	1348.4	1350	5.5				
	2695 SGMR	4	1348.2	1349.5	5.8	14.9	4.5		
	1415 ATHN	4	1348.4	1348.5	1.6	56.4	9.4		
	808 ONDR	45	1348	1349.5	8.5	60.0			
	960 PENN	29	1350.6	1350.6	8.7	2.4	1.2		
	960 PENN	8	1352.2	1352.3	.2	11.1			
	245 SGMR	6	1402.2	1410.6	9.4	79.0	20.0		
	410 SGMR	6	1405	1405.7	2.3	15.3	4.0		
	960 PENN	20	1420.7	1507.3	77.5	2.4	1.2		
	2800 OTTA	27	1424		85	.8	0.7		
	2800 OTTA	24	1424	1425	1	.8	0.4		
	2800 OTTA	24	1425		76	.8			
	283 DWIN	41	1425		9	100.0D			
	10500 BERN	4	1426.9	1427.8	2	19.0			
	9400 HUAN	2	1426.9	1427.5	2.7	17.1	7.7		
	4995 BOUL	45	1426.5	1428	2.5	44.0	13.0		
	2800 OTTA	4	1426.8	1428	3	14.2	6.8		
	315 DWIN	41	1426	1427	9	300.0D			
	10700 PENN	3	1427.2	1427.9	2.3	11.4	4.7		
	8800 SGMR	4	1427.1	1428.9	4.6	34.4	10.3		
	8800 ATHN	4	1427	1428	3.7	28.4	6.3		
	4995 SGMR	4	1427.9	1428.9	3.1	45.8	13.7		
	4995 CANR	45	1427	1428	9	46.0	17.0		
	4995 ATHN	4	1427	1427.9	3.8	41.9	10.9		
	2830 ARCE	3	1427	1428	2.5				
	2695 BOUL	8	1427.5	1428	2	10.0	3.0		
	2695 SGMR	4	1427	1428	4	13.2	4.0		
	2695 ATHN	4	1427	1427.9	3.8	12.1	3.0		
	1420 CANR	21	1427	1428.5	12	3.0	1.0		
	1415 SGMR	1	1427	1427	3	2.6	1.0		
	1415 ATHN	2	1427.1	1427.9	3.7	3.0	.9		
	960 PENN	45	1427	1427.8	3	2.4	0.6		
	606 SGMR	40	1427.1	1427.2	4.2	19.4	5.0		
	410 SGMR	6	1427.2	1427.3	1.4	180.0	45.0		
	245 SGMR	7	1427.2	1427.6	2.5	395.0	115.0		
	2695 CANR	8	1428	1429	3	13.0	4.0		
	29 UPIC	45	1428	1428.5	2				
	2800 OTTA	30	1429.8	1429.8	15	1.6	0.8		
	8800 SGMR	29	1431.7	1431.7	14.3	4.2	2.1		
	4995 SGMR	29	1431	1431	22	3.2	1.6		
	2695 SGMR	29	1431	1431	30	2.4	1.2		
	2800 OTTA	2	1433	1434.5	3	2.4	1.2		
	4995 BOUL	3	1519	1521	3.5	20.0	6.0		
	960 PENN	45	1519.3	1521.5	5	66.6	7.0		
	315 DWIN	45	1519		3	300.0D			
	283 DWIN	45	1519		3	100.0D			
	245 SGMR	48	1519.3	1520.6	8	1213.0	364.0		
	15400 SGMR	20	1520.8	1521.9	10.2	5.9	3.5		
	10700 PENN	3	1520.7	1522	11.1	11.6	3.6		
	9400 HUAN	2	1520.7	1522	2.3	13.4	6.6		
	8800 SGMR	4	1520.4	1521.9	9.6	21.4	6.4		

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NOV. 1973	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
26	4995	SGMR	46	1520.4	1521	11.1	17.3	6.7		
	4995	SGMR	46		1521.3		22.4			
	4995	CANR	21	1520.5	1521.5	11.5	24.0	4.0		
	2830	ARCE	46	1520.5	1521.3	3.6				AT SUNSET
	2695	SGMR	46	1520.4	1520.7	12.2	62.7	28.2		
	2695	SGMR	46		1521.3		93.9			
	1420	BOUL	45	1520	1523	7.5	51.0	13.0		
	1420	CANR	45	1520	1522	8	68.0	21.0		
	1415	SGMR	46	1520.4	1520.7	10.1	42.4	23.6		
	1415	SGMR	46		1521.8		78.6			
	606	SGMR	4	1520.1	1521.1	11.1	228.0	68.4		
	410	SGMR	6	1520.1	1522.2	7.4	233.0	70.0		
	2800	OTTA	4	1521	1521.5	3.5	30.0	14.0		
	2695	BOUL	45	1521	1522.5	10	61.0	18.0		
	2695	CANR	45	1521	1522	12.5	102.0	37.0		
	2800	OTTA	30	1524.5	1524.5	10	3.6	1.8		
	2800	OTTA	1	1525.5	1526	1.5	2.8	1.0		
	2800	OTTA	26	1541	1541	8	.8	0.4		
	2800	OTTA	23	1627	1712	200	2.4	1.4		
	2695	PENT	1	1649	1652	8	2.0	1.0		
	410	SGMR	6	1650.1	1652.1	3.8	51.0	15.3		
	245	SGMR	6	1650.3	1651.3	5.2	144.0	43.3		
	2695	BOUL	45	1725	1729.5	4.5	146.0	48.0		
	2800	OTTA	2	1954.6	1955	1.5	2.0	1.0		
	2695	BOUL	8	1954.5	1955.5	2	6.0	2.0		
	2695	PENT	2	1954.6	1955	1.5	2.0	1.0		
	1420	BOUL	3	1954.5	1955	1	1.0			
	245	SGMR	6	1954.2	1955.3	4.3	272.9	81.9		
	410	SGMR	6	1956.3	1956.9	1.2	3.3	1.0		
	208	VORO	6	2307	2308	1	640.0			
	200	HIRA	45	2308.5	2308.7	1	180.0	70.0		
	208	VORO	6	2312	2312	1	480.0			
	100	HIRA	45	2312.5	2312.5	1.5	200.0	40.0		
	606	MANI	41	2323.8	2324.9	9.7	11.0	9.8		
	208	VORO	49	2323	2325	2	1200.0			
	100	HIRA	45	2323	2324.6	2.5	600.0	70.0		
	500	HIRA	45	2324.5	2324.8	.5	130.0	45.0		
	200	HIRA	45	2325.5	2326	1.3	180.0	80.0		
	3750	TYKW	45	2327	2331.1	10	6.0	2.0		
	2695	CRON	3	2328.5	2330.5	3.5	7.0	2.0		
	2695	MANI	1	2328.3	2331.2	4.7	5.5	.9		
	2000	TYKW	45	2328	2331.4	7	7.0	1.5		
	1415	MANI	1	2328.3	2329.2	4.7	9.6	1.9		
	1000	TYKW	45	2328	2329.1	7	12.0	1.5		
	500	HIRA	45	2328.8	2329	1	390.0	80.0		
	208	VORO	49	2328	2328	4	1900.0			
	100	HIRA	45	2328	2329	4.5	1000.0D	120.0D		
	1420	CRON	3	2330	2332	2.5	5.0	2.0		
27	9400	TYKW	20	0120	0125	20	3.0	1.0		
	2000	TYKW	20	0120	0123.9	20	7.0	1.5		
	4995	CRON	3	0121.5	0124	4	5.0	1.0		
	4995	MANI	20	0122.1	0130.2	15.9	16.8	4.2		
	2695	CRON	45	0122	0122.5	3	6.0	2.0		
	1000	TYKW	45	0122	0124	3 D	5.0	1.5U		
	3750	TYKW	20	0123	0124	15	2.0	1.0		
	2695	MANI	20	0123	0123.8	15	5.5	.9		
	1420	CRON	3	0123	0124	2	6.0	2.0		
	1415	MANI	22	0123	0124.2	15	6.2	1.4		
	606	MANI	22	0123.2	0133	14.8	5.9	1.5		
	208	VORO	7	0123	0126	16	130.0			
	606	MANI	41	0246.7	0257.5	12.3	8.5	.9		
	208	VORO	6	0246	0250	9	1200.0			
	1415	MANI	1	0250.4	0251.1	4.6	4.7	.5		
	200	HIRA	45	0250	0250.2	2.5	180.0	50.0		
	4995	CRON	3	0301	0312	11.5	23.0	6.0		
	9750	IRKU	1	0305	0307	5	7.3			
	2695	CRON	45	0308.5	0311.5	10	29.0	12.0		
	4995	MANI	4	0309.8	0312.7	8.8	27.4	4.2		
	2695	MANI	4	0309.8	0312	8.8	29.1	7.3		
	1415	MANI	4	0309.2	0312.9	9.6	39.5	9.4		
	606	MANI	40	0309.2	0311.8	7.6	162.0	12.2		
	9400	TYKW	20	0310	0315	15	6.0	2.0		
	3750	TYKW	45	0310	0312.5	10	29.0	5.0		
	2000	TYKW	45	0310	0312	10	34.0	5.0		
	1000	TYKW	45	0310	0312	7	22.0	4.0		
	1420	CRON	3	0311	0313.5	5.5	35.0	13.0		
	200	HIRA	45	0311.5	0312.2	2	35.0	15.0		
	100	HIRA	45	0311.5	0313.7	3.5	110.0	30.0		
	9750	IRKU	20	0316.1	0317	1.2	5.8			
	200	HIRA	45	0350.5	0351.6	2	35.0	15.0		
	100	HIRA	45	0350	0350.8	2.5	150.0	30.0		
	9750	IRKU	20	0415	0425	13	6.0			
	606	MANI	40	0810.8	0817.5	10.8	26.4	7.4		
	260	ONDR	44	0810	0906.5	130	95.0			
	315	DWIN	44	0820	0902	420	150.0	25.0		
	283	DWIN	44	0820		420	100.0D	35.0		
	234	POTS	41	0903.3	0903.4	3.8	500.0	8.0		
	260	ONDR	44	1020	1223	230	30.0			
	245	SGMR	44	1154 E	1232.6	554 D	41.8			

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NOV. 1973	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
	1415	MANI	2	0817.6	0818.6	2.7	2.3	.9		
	536	ONDR	5	1333.5	1333.5	.5	35.0			
	18	MCMA	6	1336	1339	3			2	
	2800	OTTA	8	1822	1822.8	1	1.2			
	2800	OTTA	1	1904	1904.8	2.5	2.0	1.0		
	208	VORO	44	2300	0235	240	25.5			
28	260	ONDR	44	0750	0852	380	65.0			
	4995	CANR	3	0805.5	0806.5	1.5	10.0	3.0		
	2695	CANR	3	0806	0807.5	2.5	8.0	2.0		
	1420	CANR	3	0806	0806.5	2	4.0	1.0		
	2695	CANR	3	0827.5	0828.5	3.5	5.0	2.0		
	4995	CANR	3	0828	0828.5	2.5	6.0	2.0		
	1420	CANR	3	0828	0829	3	2.0	1.0		
	550	KIEV	24	0836	0906	53	35.0			
	221	ABST	3	0854.7	0854.5	30	33.0			
	245	SGMR	44	1155 E	1725	554 D	63.5			
29	9750	IRKU	1	0550.7	0551	1	3.0			
	260	ONDR	41	0720	0941.5	400	25.0			
	2800	OTTA	20	1452	1507	30	1.6	0.8		
	9240	ARCE	40	1510.2	1511	1.6				RECORD DIST
	2800	OTTA	20	1950	1952	10	1.6	0.8		
30	260	ONDR	41	0730	1111	400	15.0			
	3100	CRIM	24	0856	0918	76	13.0	4.0		
	9240	ARCE	21	0905.6	0919	70				
	2830	ARCE	21	0910 U	0926.8	156 U				
	4995	CRON	3	0912.5	0918	7	7.0	2.0		
	2695	CRON	45	0913.5	0917.5	5.5	10.0	3.0		
	3000	BERL	4	0914	0918	31	10.0	1.2		
	2830	ARCE	4	0914.6	0918	5.5				
	2695	CANR	45	0914	0919	7.5	13.0	3.0		
	1500	BERL	22	0914	0918.2	21 U	3.0U	1.0U		
	4995	CANR	3	0916.5	0918	2.5	7.0	2.0		
	1420	CRON	3	0917	0918.5	2.5	3.0	1.0		
	1420	CANR	3	0918	0918.5	1.5	2.0	1.0		
	9240	ARCE	1	0938.2	0938.7	1.6				
	2800	OTTA	2	1323.5	1325.5	5.5	9.6	2.8		
	4995	CANR	3	1324.5	1326.5	3.5	8.0	3.0		
	2695	CANR	3	1325.5	1327	3.5	6.0	2.0		
	1420	CANR	3	1325.5	1326.5	2.5	2.0	1.0		
	2800	OTTA	20	1435	1700	300	3.4	2.0		
	9400	HUAN	20	1945.3	1958.2	29.5	10.1	6.4		
	2800	OTTA	21	1946	2008	110	6.8	4.0		
	4995	BOUL	45	1947.5	1948	7.5	16.0	5.0		
	2800	OTTA	3	1947	1948.3	2.5	23.4	11.7		
	1420	BOUL	45	1947.5	1948.5	6	10.0	3.0		
	2695	BOUL	45	1948	1949	5	21.0	6.0		
	2800	OTTA	30	1949.5	1949.5	8.5	5.8	2.9		
	2800	OTTA	1	1950.5	1951	2.5	2.6	1.9		

Observatories:

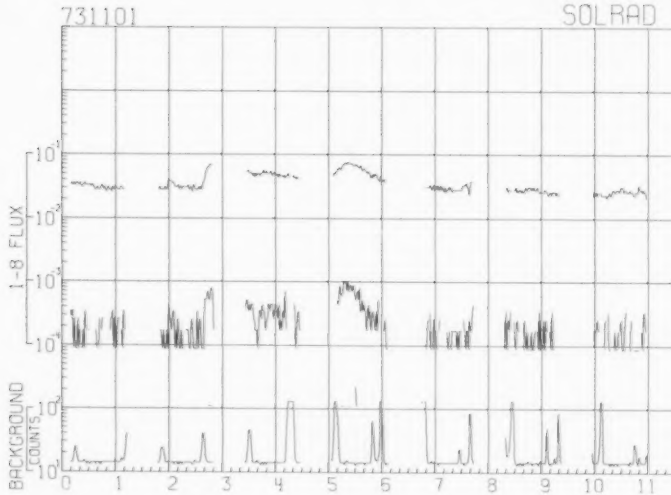
ABST = Abastumani
ARCE = Arcetri
BERL = Berlin-Adlershof
BERN = Berne
BORD = Bordeaux
BOUL = Boulder
CANR = Canary Islands
CRIM = Simferopol
CRON = Carnarvon
DWIN = Dwingeloo
GORK = Gorky
HARS = Harestua
HIRA = Hiraiso
HUAN = Huancayo
IRKU = Irkutsk
IZMI = Moscow IZMIRAN
KIEV = Kiev
KISV = Kislovodsk
MANI = Manila
MCMA = McMath-Hulbert
ONDR = Ondrejov
OTTA = Ottawa ARO
PENN = Penn. State Univ.
PENT = Penticton
POTS = Potsdam
SAOP = Sao Paulo
SGMR = Sagamore Hill
SLOU = Slough
TRST = Trieste
TYKW = Toyokawa
UPIC = Upice
VORO = Voroshilov

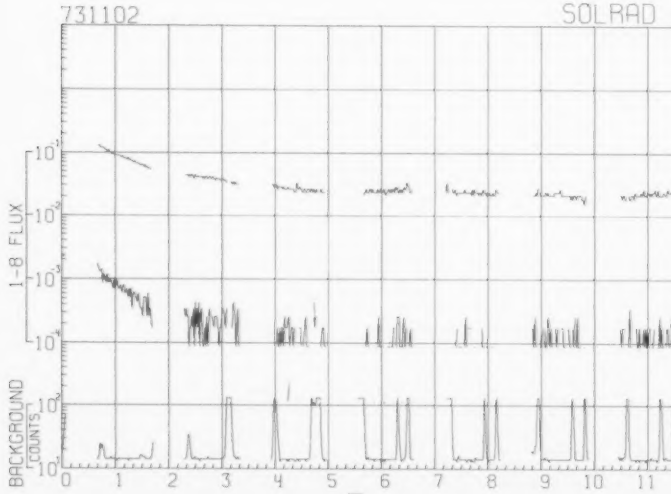
Explanation of Type Code:

1 Simple 1
2 Simple 1F
3 Simple 2
4 Simple 2F
5 Simple
6 Minor
7 Minor +
8 Spike
20 Simple 3
21 Simple 3A
22 Simple 3F
23 Simple 3AF
24 Rise
25 Rise A
26 Fall
27 Rise and Fall
28 Precursor
29 Post Burst Increase
30 Post Burst Increase A
31 Post Burst Decrease
32 Absorption
40 Fluctuation
41 Group of Bursts
42 Series of Bursts
43 Onset of Noise Storm
44 Noise Storm in Progress
45 Complex
46 Complex F
47 Great Burst
48 Major
49 Major +

SOLAR X-RAYS MEASURED BY SA

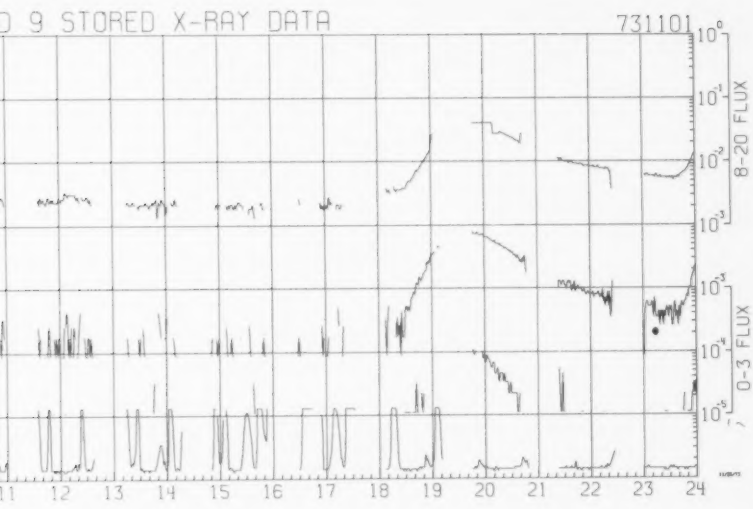
NOVE

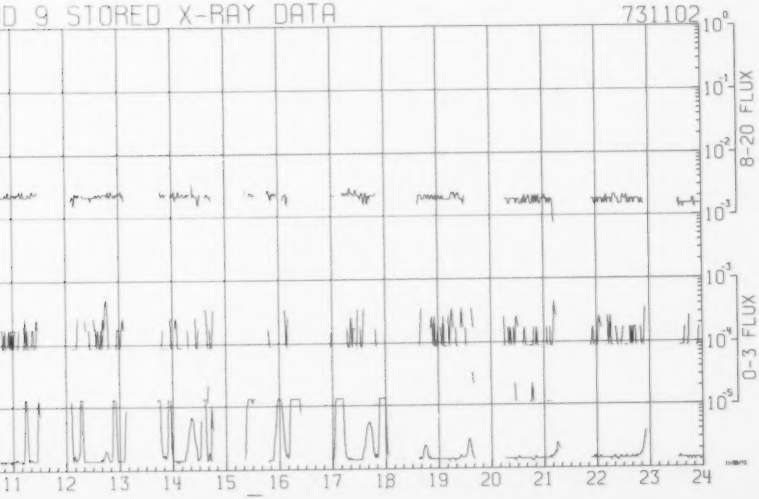




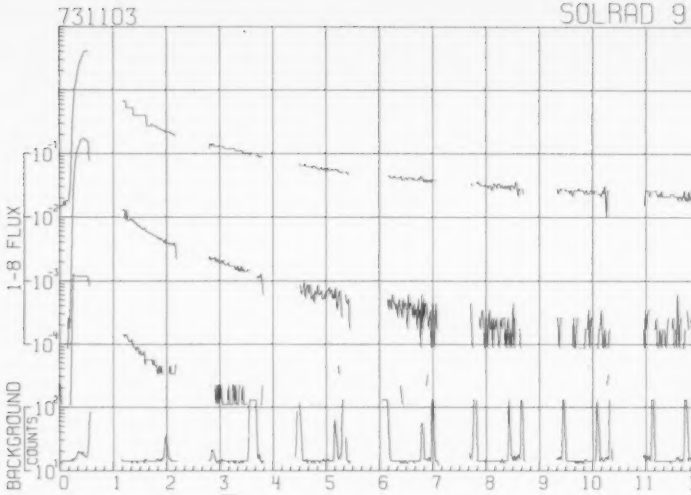
SATELLITE SOLRAD 9 - EXPLORER 37

VEMBER 1973





21 Nov 73


731103
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1-8 FLUX
BACKGROUND
COUNTS
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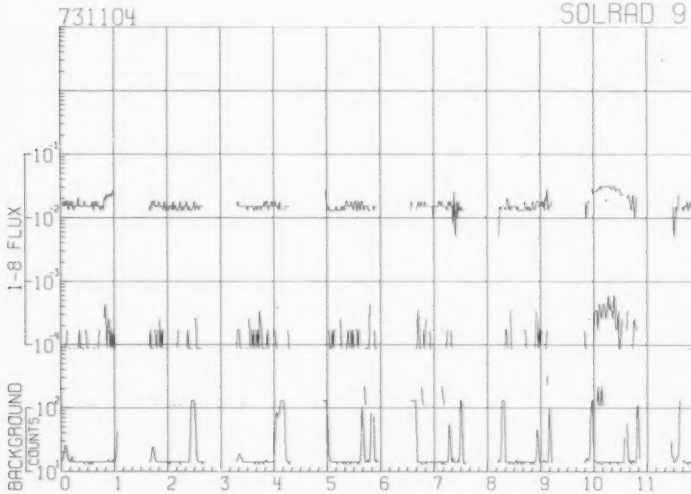
731104
SOLRAD 9
1-8 FLUX
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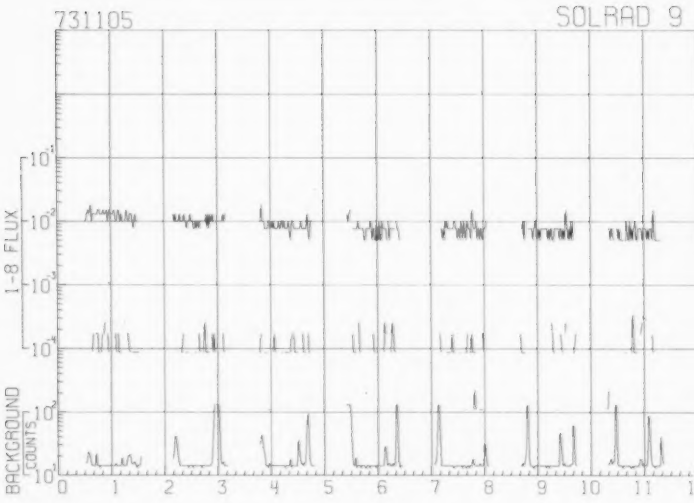
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

22 Nov 73

9 STORED X-RAY DATA 731103

9 STORED X-RAY DATA 731104


731105
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1-8 FLUX
BACKGROUND
COUNTS
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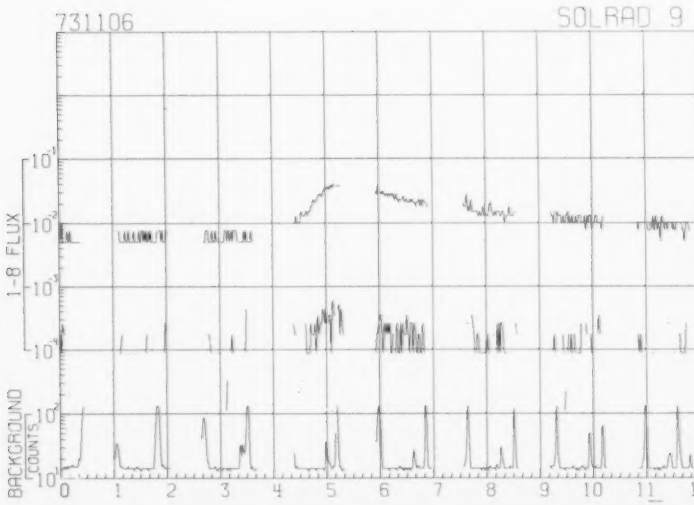
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BACKGROUND
COUNTS
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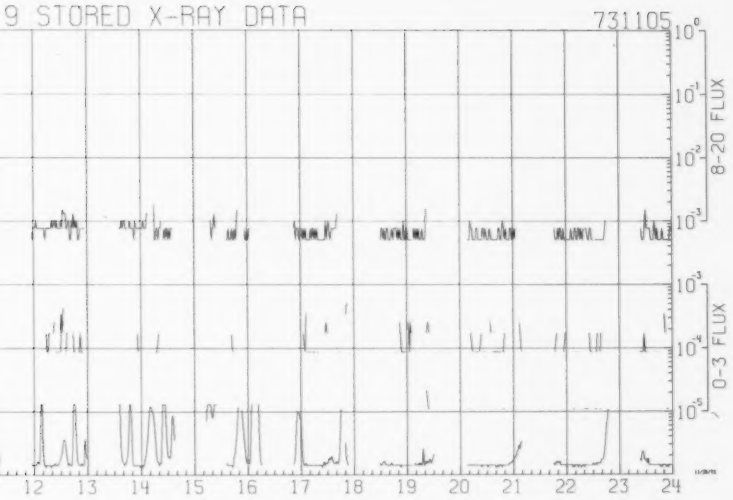
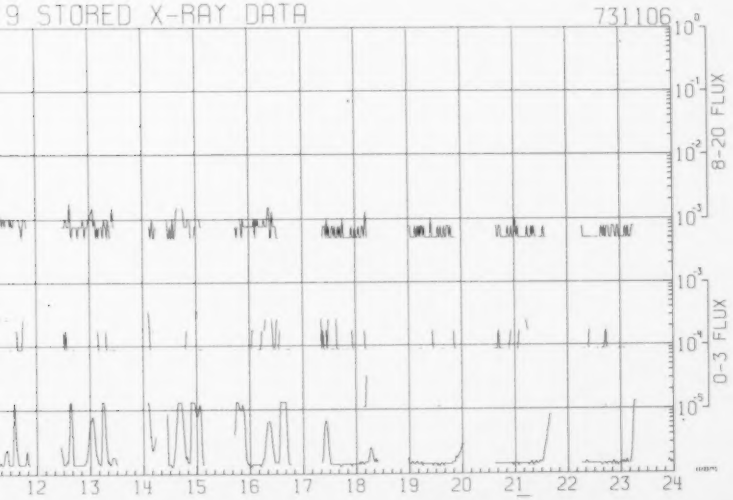

9 STORED X-RAY DATA
731105
8-20 FLUX
0-3 FLUX
12 13 14 15 16 17 18 19 20 21 22 23 24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731106
8-20 FLUX
0-3 FLUX
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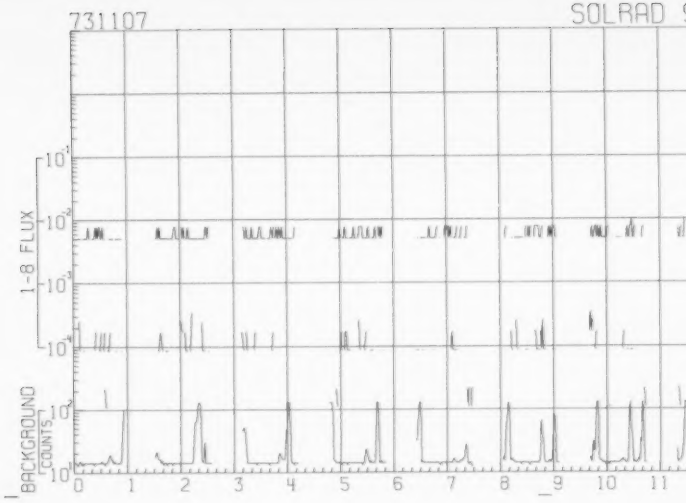
23 Nov 73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1-8 FLUX
BACKGROUND COUNTS
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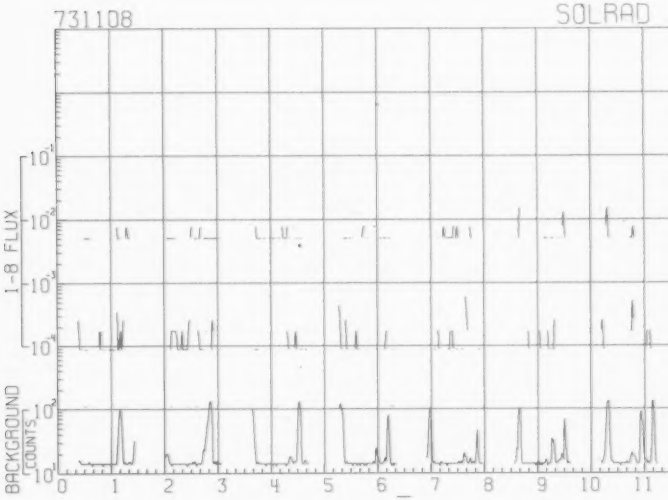

731108
SOLRAD
1-8 FLUX
BACKGROUND COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

24
Nov 73

D 9 STORED X-RAY DATA 731107

8-20 FLUX

0-3 FLUX

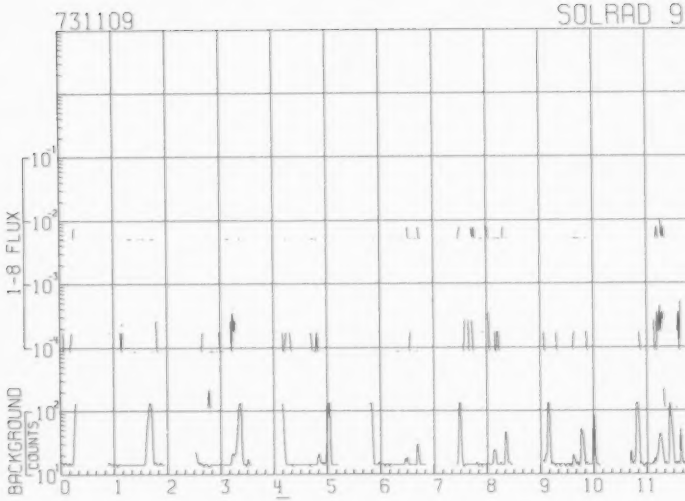
1 12 13 14 15 16 17 18 19 20 21 22 23 24

D 9 STORED X-RAY DATA 731108

8-20 FLUX

0-3 FLUX

11 12 13 14 15 16 17 18 19 20 21 22 23 24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1-8 FLUX
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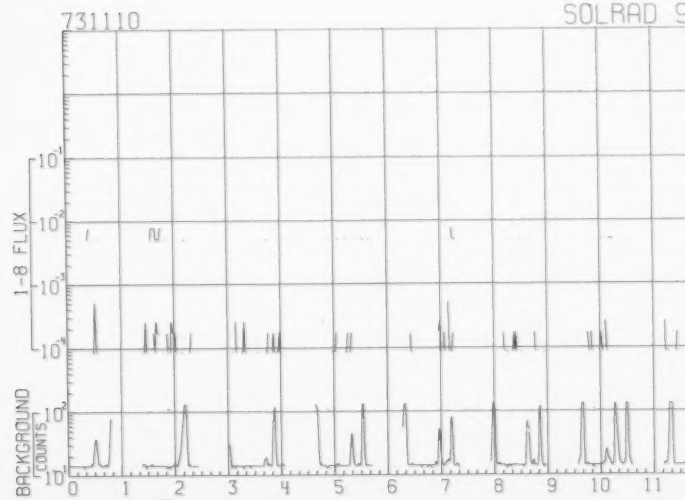
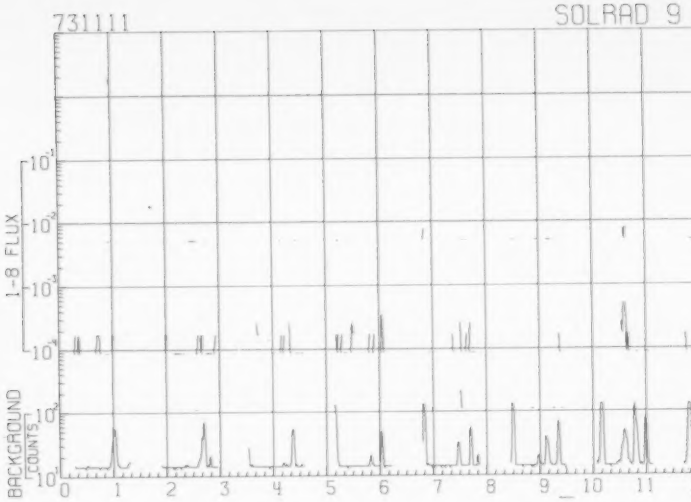

731110
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

9 STORED X-RAY DATA 731109

9 STORED X-RAY DATA 731110

25 Nov 73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1-8 FLUX
BACKGROUND COUNTS
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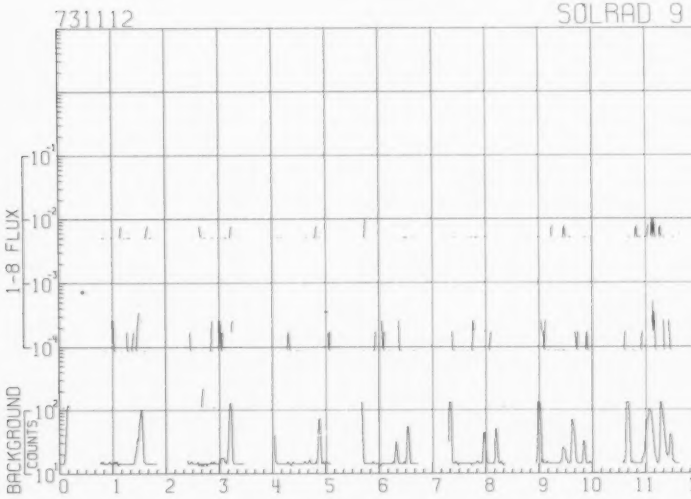
731112
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
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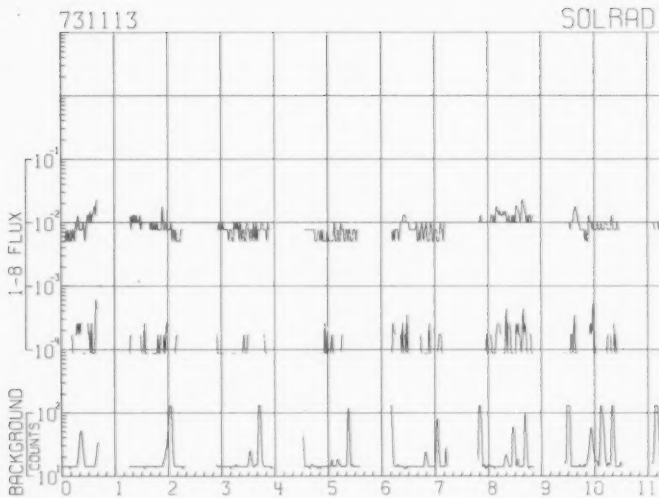
26 Nov 73

9 STORED X-RAY DATA 731111

9 STORED X-RAY DATA 731112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1-8 FLUX
BACKGROUND
COUNTS
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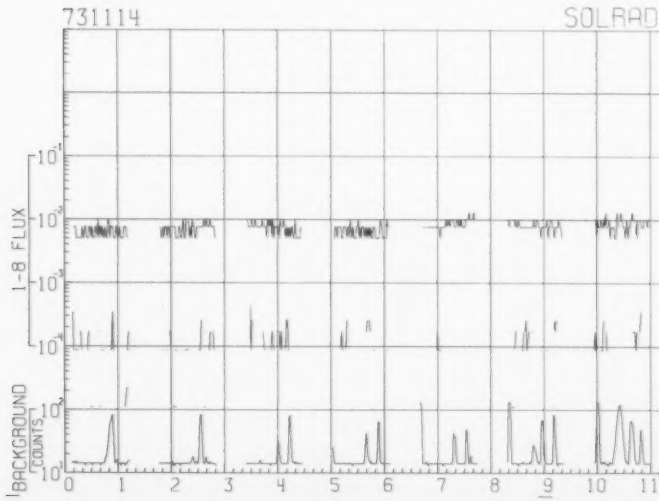
731114
SOLRAD
1-8 FLUX
BACKGROUND
COUNTS
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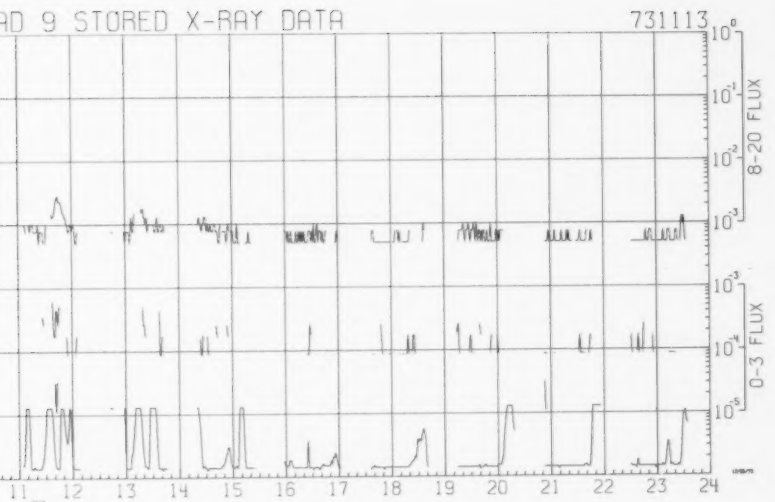
AD 9 STORED X-RAY DATA
731113
8-20 FLUX
0-3 FLUX
11
12
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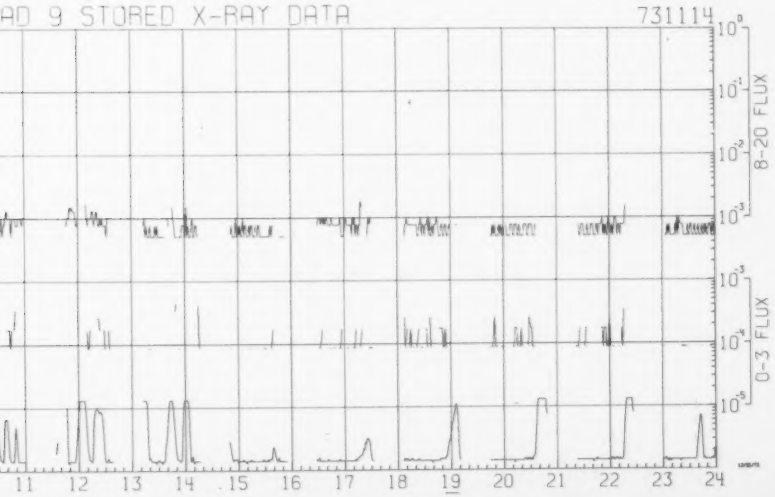
23
24


AD 9 STORED X-RAY DATA
731114
8-20 FLUX
0-3 FLUX
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12
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15
16
17
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21
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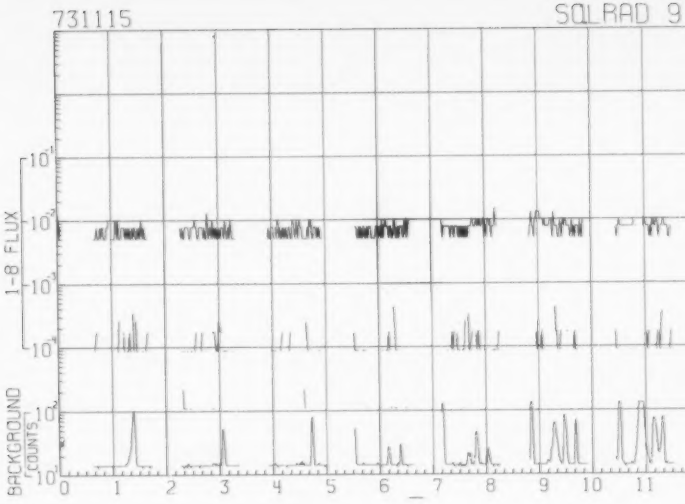
23
24

27 Nov 73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1-8 FLUX
BACKGROUND
COUNTS
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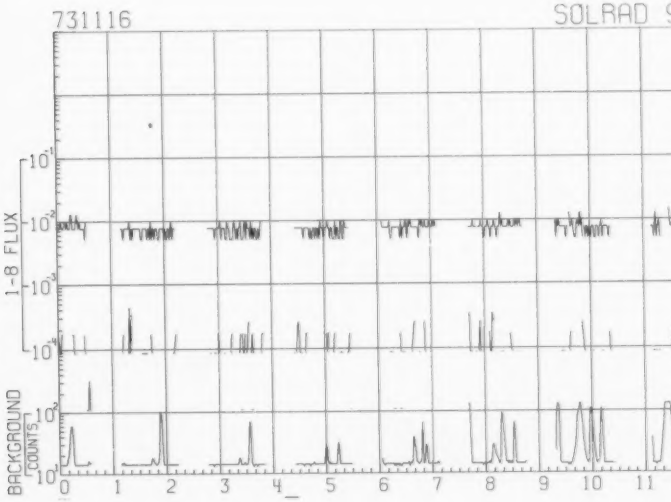

731116
SOLRAD
1-8 FLUX
BACKGROUND
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

28 Nov 73

9 STORED X-RAY DATA 731115

8-20 FLUX

0-3 FLUX

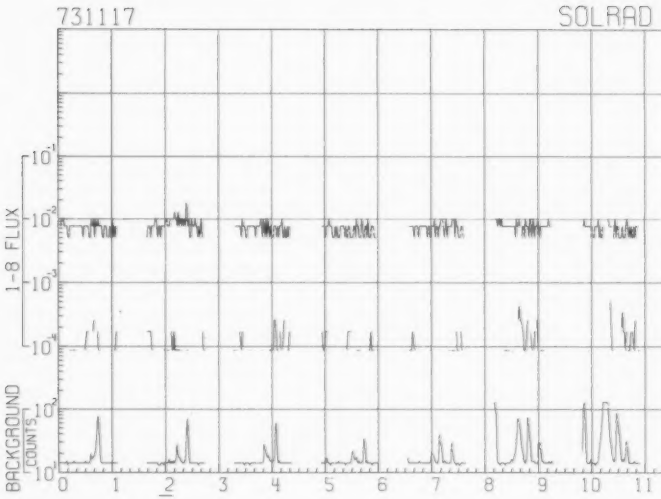
12 13 14 15 16 17 18 19 20 21 22 23 24

9 STORED X-RAY DATA 731116

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24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1-8 FLUX
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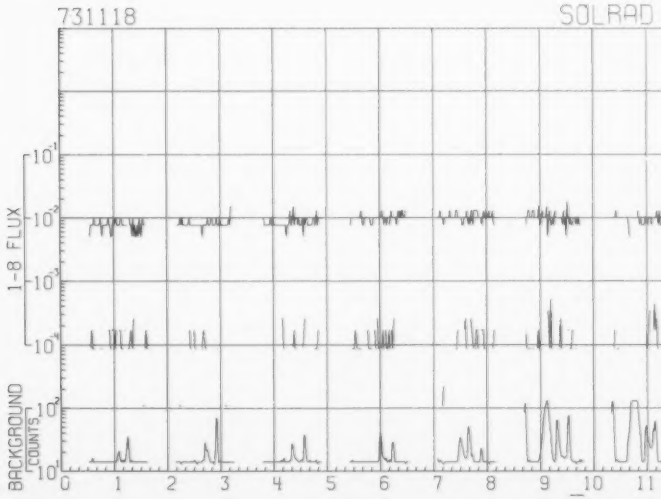
10^{-2}
10^{-3}
10^{-4}
BACKGROUND
COUNTS
10^{3}
10^{2}
10^{1}
0 1 2 3 4 5 6 7 8 9 10 11


731118
SOLRAD
1-8 FLUX
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10^{-2}
10^{-3}
10^{-4}
BACKGROUND
COUNTS
10^{3}
10^{2}
10^{1}
0 1 2 3 4 5 6 7 8 9 10 11

AD 9 STORED X-RAY DATA 731117

AD 9 STORED X-RAY DATA 731118

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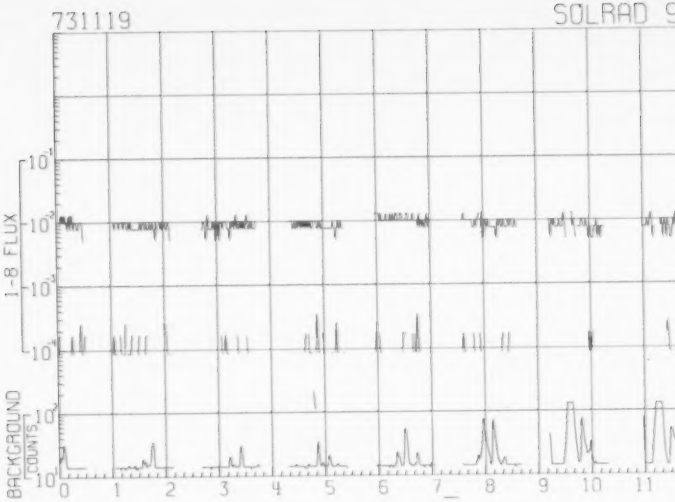
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BACKGROUND COUNTS
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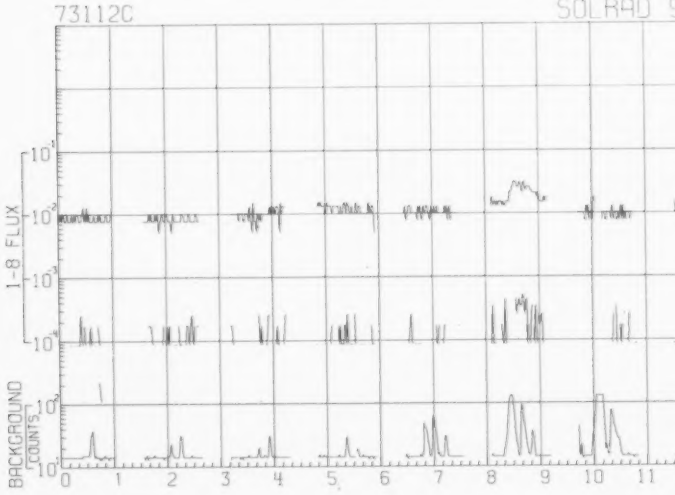
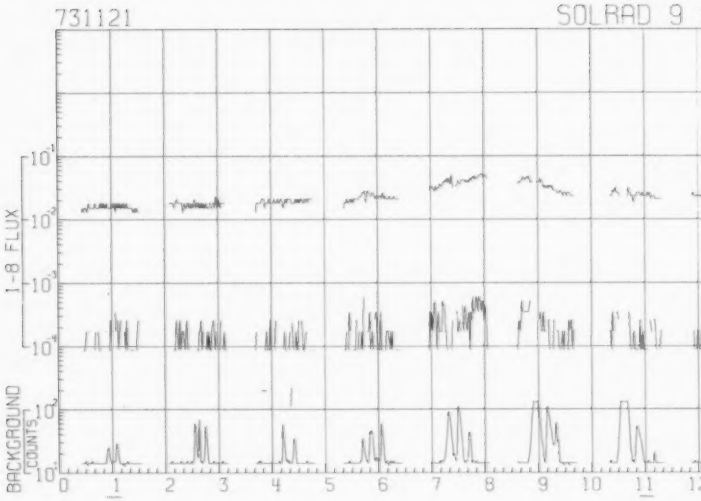

731120
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

9 STORED X-RAY DATA
731119
8-20 FLUX
0-3 FLUX
12 13 14 15 16 17 18 19 20 21 22 23 24

9 STORED X-RAY DATA
731120
8-20 FLUX
0-3 FLUX
12 13 14 15 16 17 18 19 20 21 22 23 24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1-8 FLUX
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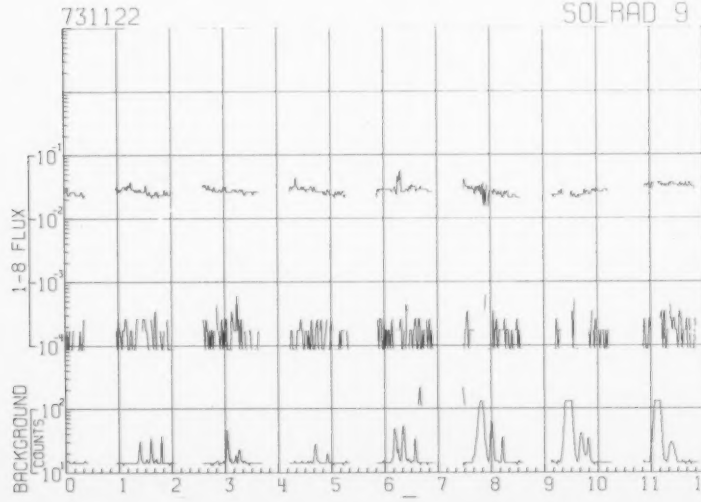
731122
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
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9 STORED X-RAY DATA 731121

10^{0}
10^{-1}
10^{-2}
10^{-3}
8-20 FLUX

10^{-3}
10^{-4}
10^{-5}
0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

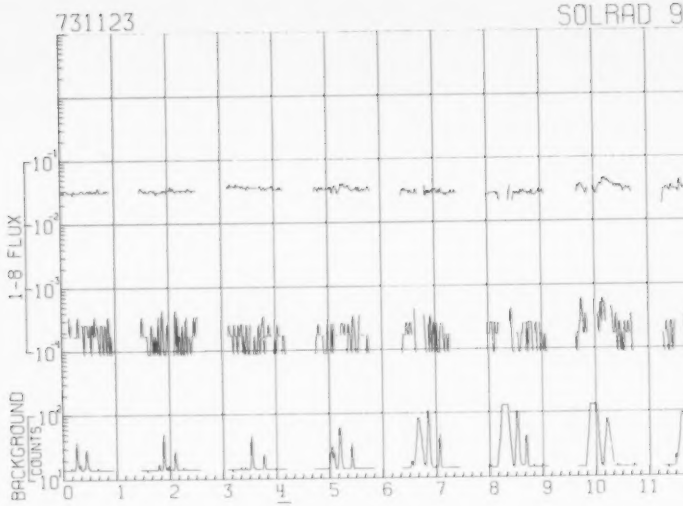
9 STORED X-RAY DATA 731122

10^{0}
10^{-1}
10^{-2}
10^{-3}
8-20 FLUX

10^{-3}
10^{-4}
10^{-5}
0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24

31
Nov 73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1-8 FLUX
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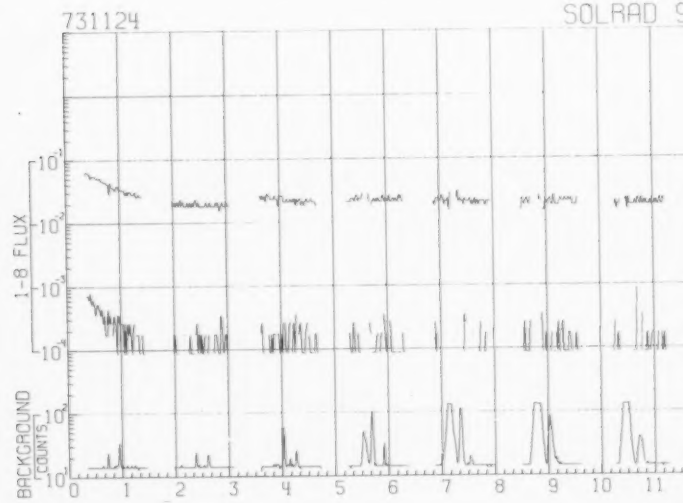
731124
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1-8 FLUX
BACKGROUND COUNTS
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9 STORED X-RAY DATA 731123

8-20 FLUX

0-3 FLUX

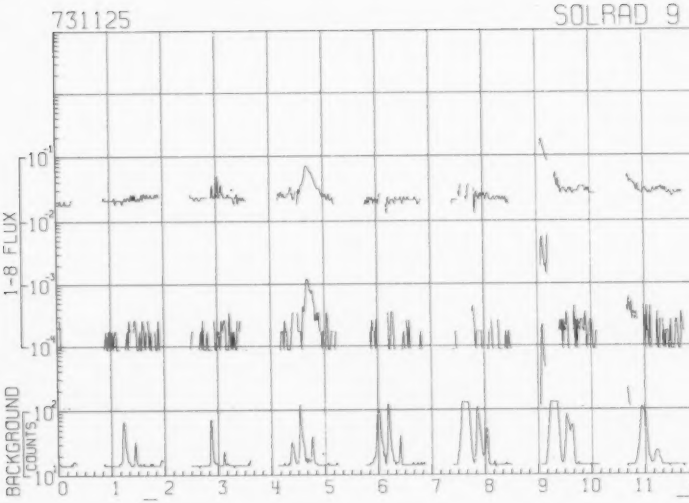
12 13 14 15 16 17 18 19 20 21 22 23 24

9 STORED X-RAY DATA 731124

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24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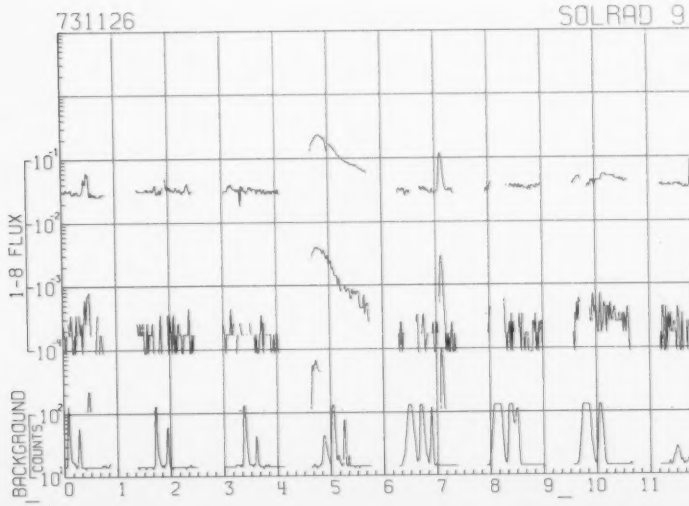
731126
SOLRAD 9
1-8 FLUX
BACKGROUND COUNTS
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9 STORED X-RAY DATA 731125

8-20 FLUX

0-3 FLUX

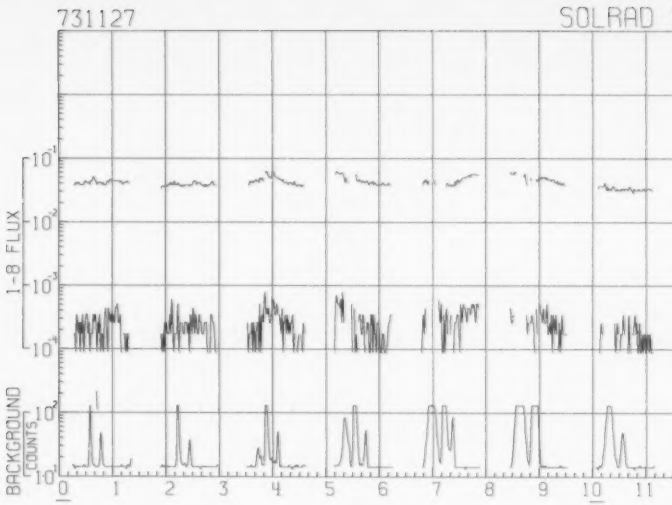
12 13 14 15 16 17 18 19 20 21 22 23 24

9 STORED X-RAY DATA 731126

8-20 FLUX

0-3 FLUX

12 13 14 15 16 17 18 19 20 21 22 23 24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SOLRAD
1-8 FLUX
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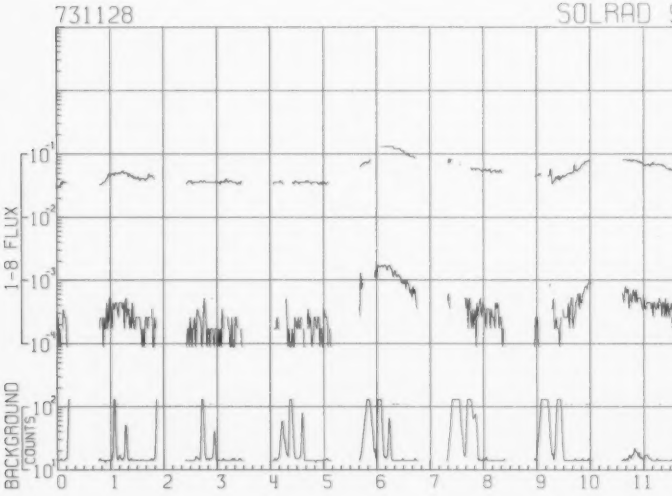
731128
SOLRAD
1-8 FLUX
BACKGROUND COUNTS
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D 9 STORED X-RAY DATA 731127

8-20 FLUX

0-3 FLUX

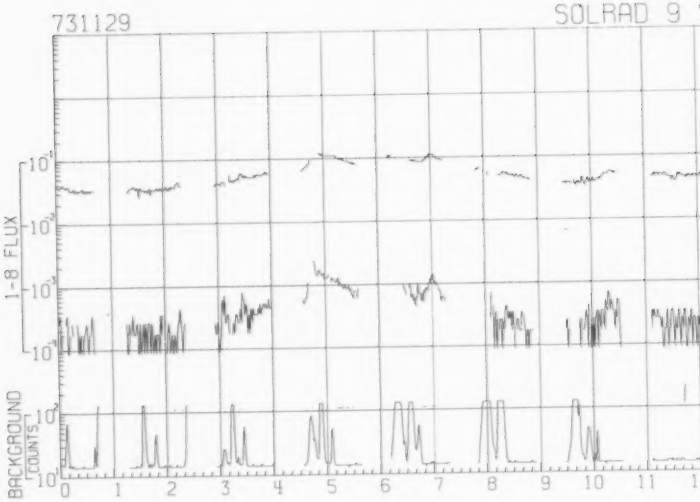
1 12 13 14 15 16 17 18 19 20 21 22 23 24

D 9 STORED X-RAY DATA 731128

8-20 FLUX

0-3 FLUX

1 12 13 14 15 16 17 18 19 20 21 22 23 24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1-8 FLUX
BACKGROUND
COUNTS
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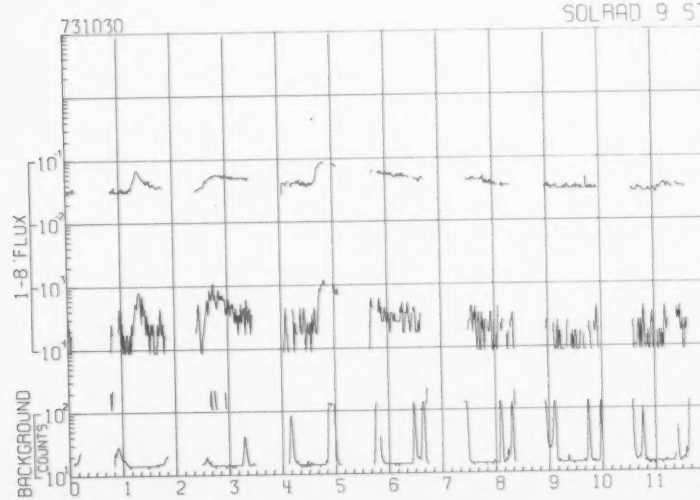
731030
SOLRAD 9
1-8 FLUX
BACKGROUND
COUNTS
0 1 2 3 4 5 6 7 8 9 10 11

9 STORED X-RAY DATA

731129

STORED X-RAY DATA

731030

35
Nov 73

OCTOBER 1973 DATA

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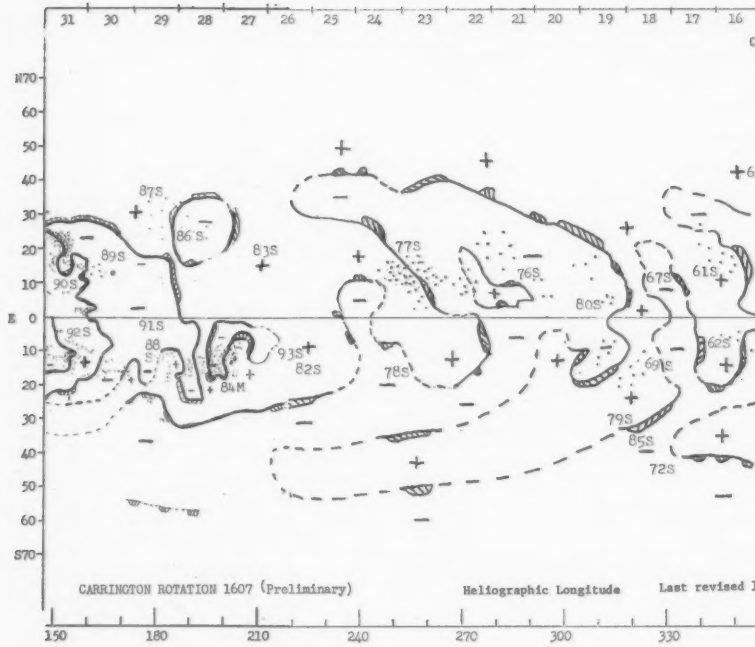
For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

ABBREVIATED CA

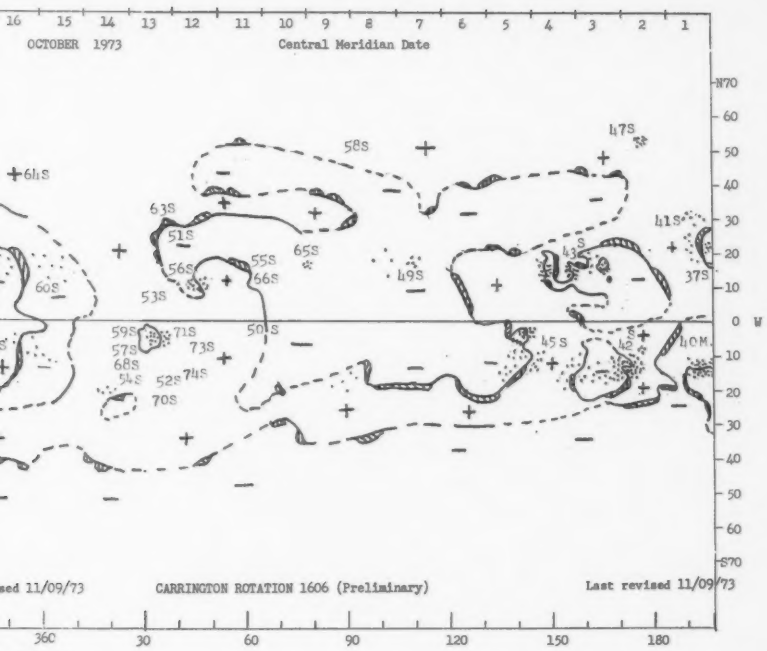
OCTOBER



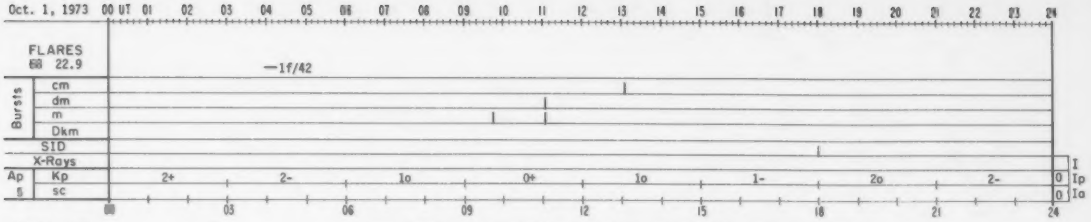
Hα Synopt

CALENDAR RECORD

OBER 1973

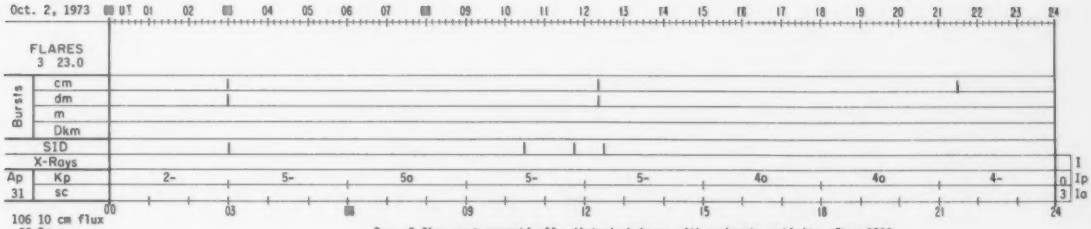


noptic Chart



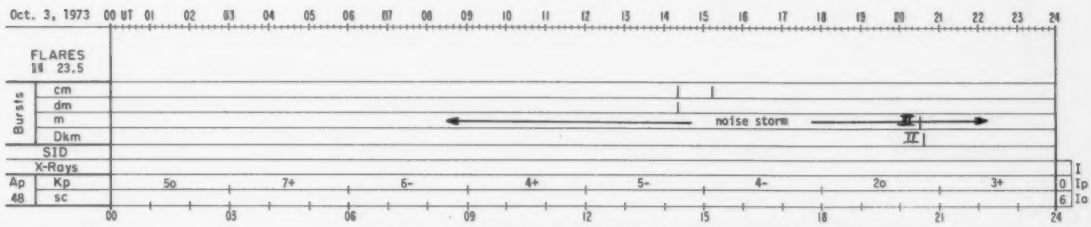
109 10 cm flux
68 Rz (Final)
CMP 12537 N22 (2) 19265 N21 (αp)5 CMP Sept. 30
12540 S14 (4) (19267) S18 αp
19268 S15 (βp)4
12541 N30

One of five most magnetically quiet days; moderately br. green corona 7 days earlier on SE limb, no coronal data 7 days later on W. limb.



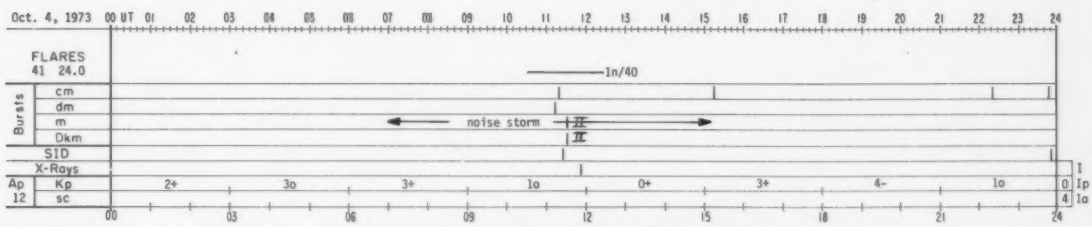
106 10 cm flux
66 Rz
CMP (12547) N53
12542 S14 (2) 19269 S14 (β)4
(19271) S17 αp CMP Oct. 4
(19274) S16 (βf)2 CMP Oct. 3

One of five most magnetically disturbed days, with moderate activity after 0300; aurora overhead over USSR at ϕ = 59° 1100-1200 and ϕ = 58° 1700, 1900 and 2300, auroral glow visible over NW Scotland from 2100, moved south to be identified as arc with base overhead at ϕ = 64-66° from 2310-0500, rayed activity intermittent from 2312, display visible over northern England at ϕ = 57° 2300-0100 with arc formation discernible there 2330-0030, flaming report over NW Scotland 2315; no coronal data 7 days earlier on E. limb, very br. green corona 7 days later on SW limb and moderately br. green corona 7 days later on NW limb.



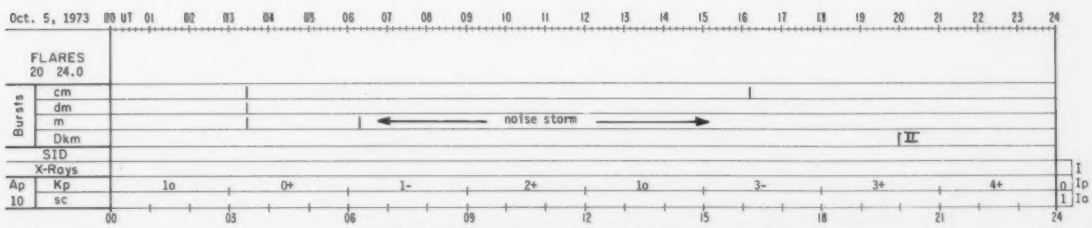
103 10 cm flux
52 Rz
CMP 12543 N15 (2) 19270 N12 (αp)5
(19272) N19 β
(19273) N16 α CMP Oct. 4

One of five most magnetically disturbed days, with moderate storm 0300-1500; aurora overhead over USSR at ϕ = 58° 0000, auroral glow visible over NW Scotland and identified as arc with base overhead at ϕ = 64-66° 0000-0500, display visible over northern England at ϕ = 57° 0000-0100 with arc discernible 0000-0030; moderately br. green corona 7 days earlier on SE limb, very br. green corona 7 days later on SW limb.



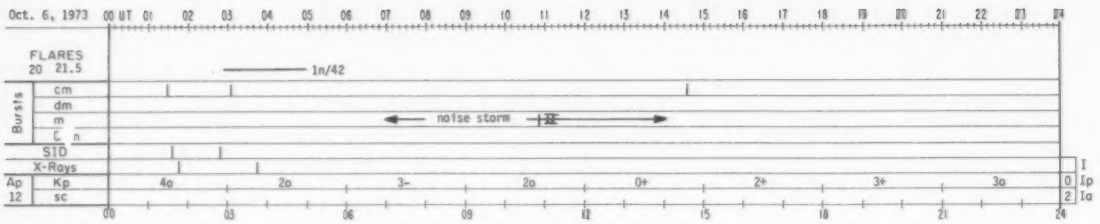
95 10 cm flux
50 Rz

Aurora overhead over USSR at ϕ = 59° 1900; moderately br. green corona 7 days earlier on SE limb, br. green corona 7 days later on SW limb.



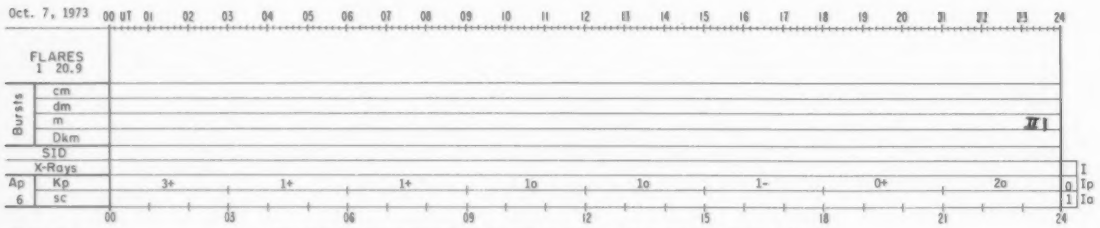
91 10 cm flux
44 Rz
CMP 12545 S12 (2) (19275) S10 (αp)3 CMP Oct. 4

Auroral glow visible between cloud in north Wales at ϕ = 57° 2107, no coronal data 7 days later on W. limb.



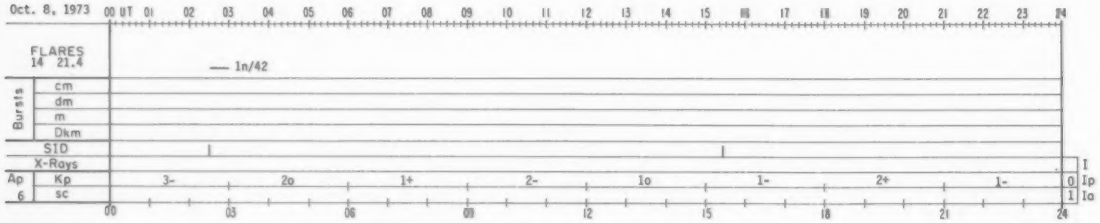
86 10 cm flux
38 Rz

No coronal data 7 days later on W. limb.



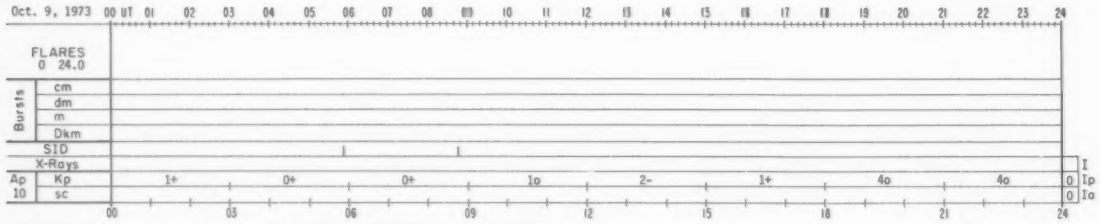
82 10 cm flux
30 Rz
CMP (12549) N17

One of ten most magnetically quiet days; no coronal data 7 days earlier on E. limb.



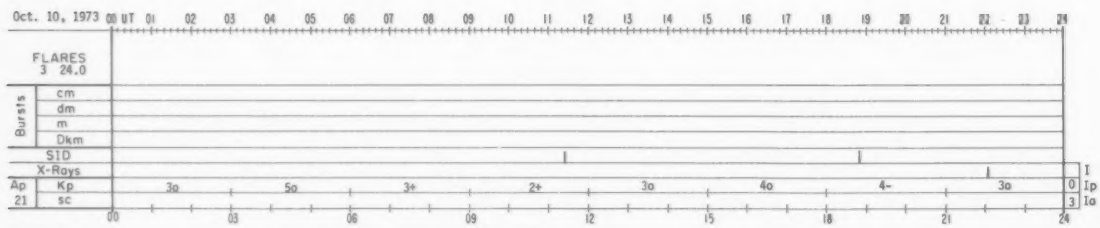
80 10 cm flux
22 Rz
CMP (12558) N51

One of ten most magnetically quiet days.



79 10 cm flux
23 Rz

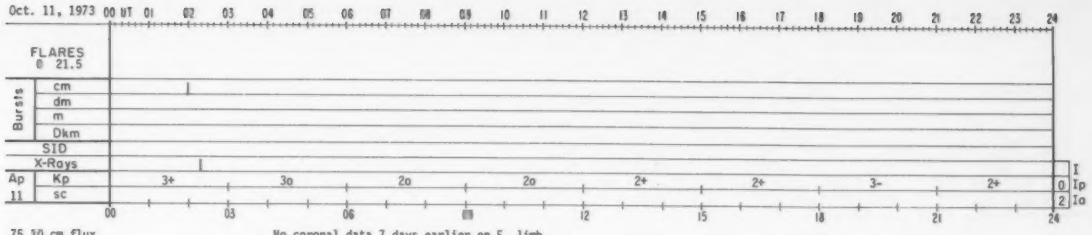
No coronal data 7 days earlier on E. limb.



77 10 cm flux
8 Rz
CMP (12565) N19
12550 S01

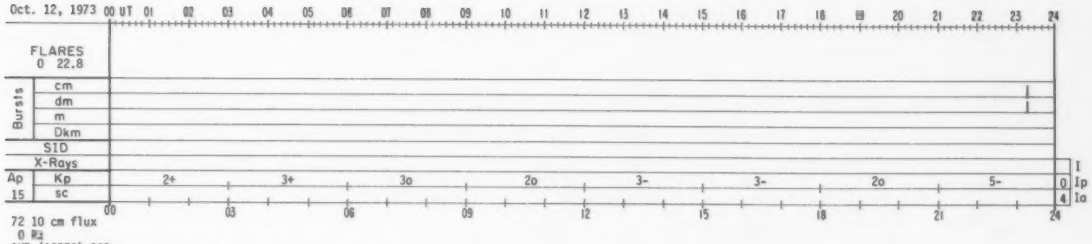
No coronal data 7 days earlier on E. limb.

S01 (observed by Boulder and Canary Is.)

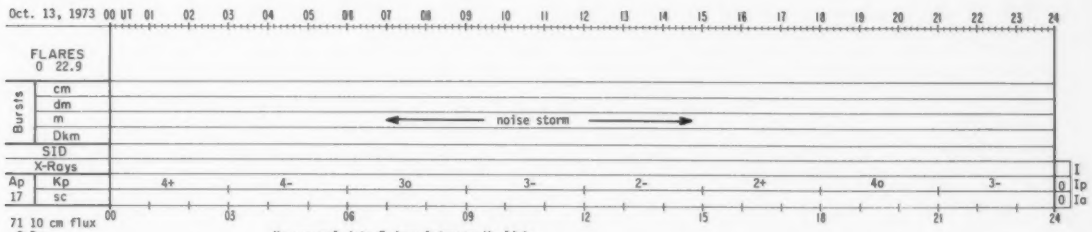


75 10 cm flux
0 Rz
CMP (12566) N12
(12555) N14

No coronal data 7 days earlier on E. limb.

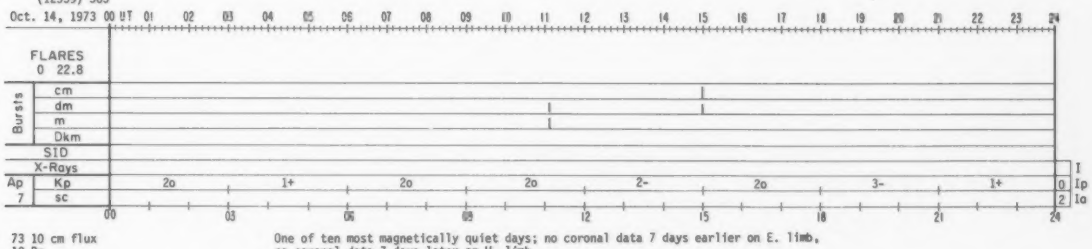


72 10 cm flux
0 Rz
CMP (12573) S08
12556 N12 (19276) N13 (Bp)3
(12574) S15
(12552) S15
(12551) N26



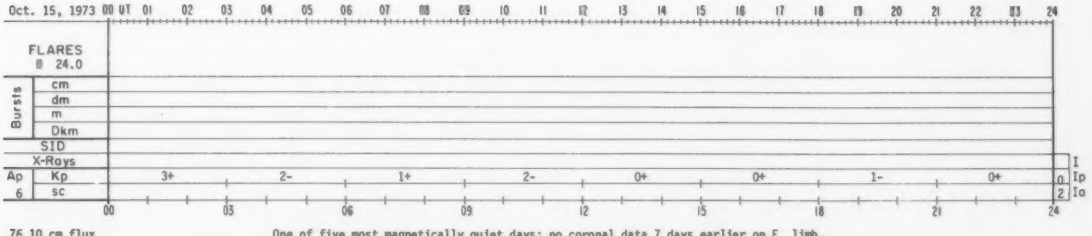
71 10 cm flux
8 Rz
CMP (12563) N29
(12570) S23
(12571) S04 (19278) S04 (B)3
(12553) N07
(12557) S08
(12559) S03

No coronal data 7 days later on W. limb.



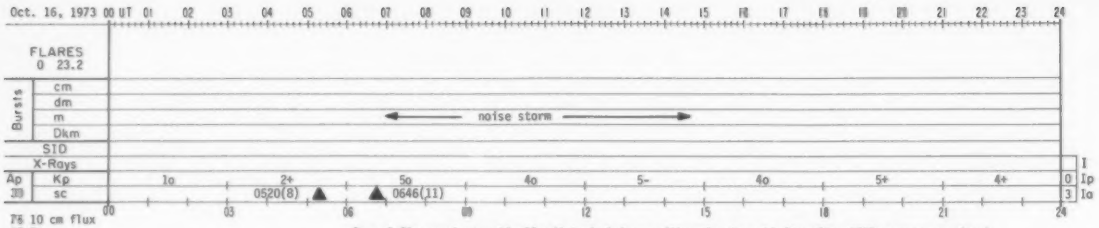
73 10 cm flux
10 Rz
CMP 12554 S16
12568 S03

One of ten most magnetically quiet days; no coronal data 7 days earlier on E. limb,
no coronal data 7 days later on W. limb.



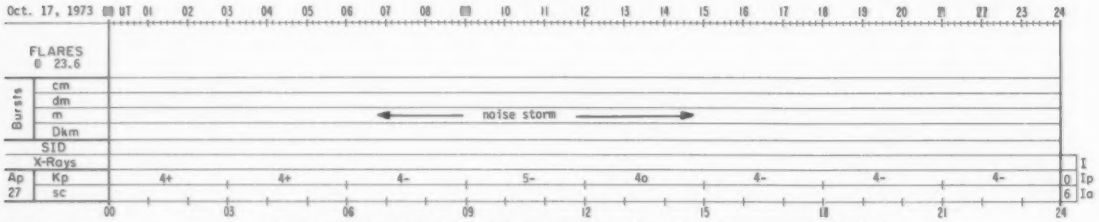
76 10 cm flux
16 Rz
CMP 12560 N15

One of five most magnetically quiet days; no coronal data 7 days earlier on E. limb,
no coronal data 7 days later on W. limb.



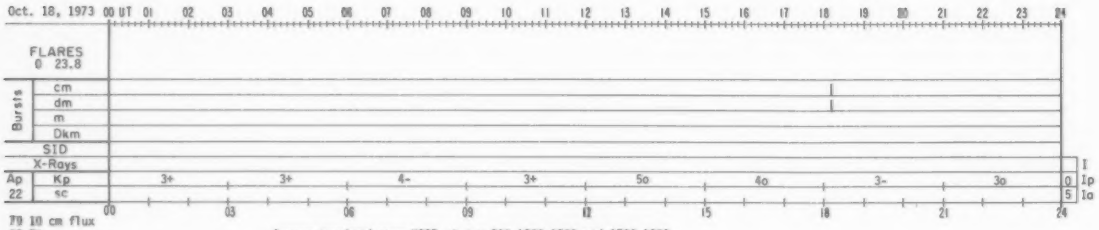
75 10 cm flux
18 Rz
CMP (12564) N41
12562 S07 (2) (19277) S06 α CMP Oct. 17

One of five most magnetically disturbed days, with moderate activity after 0900; aurora overhead over USSR at ϕ = 58° 2000 and 2200 and ϕ = 57° 2100, auroral glow visible over northern England at ϕ = 58° 1935-0030, over central Scotland pulsating noted at ϕ = 59° 1940-2030 and rayed 2020-2030, cloudy conditions over northern Scotland, but estimated position of base over head of arc at ϕ = 62-63° around 2000; no coronal data 7 days later on W. limb.



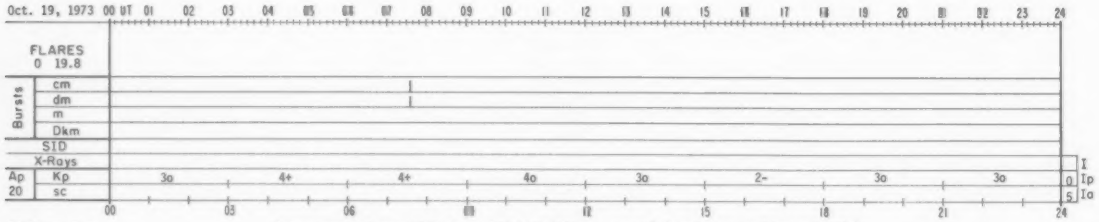
80 10 cm flux
19 Rz
CMP (12561) N17 (3)

Aurora overhead over USSR at ϕ = 59° 1200-1400, auroral glow visible over northern England at ϕ =58° 0000-0030, auroral glow visible over southern Scotland at ϕ = 58° 1830-2300.



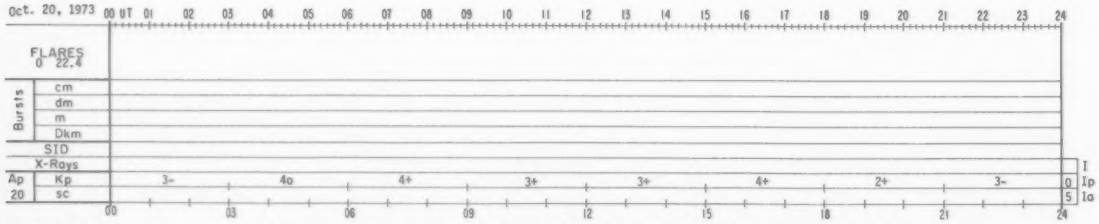
79 10 cm flux
15 Rz
CMP 12569 S13
(12567) N12
(12572) S43
(12585) S36

Aurora overhead over USSR at ϕ = 59° 1200-1500 and 1700-1900.



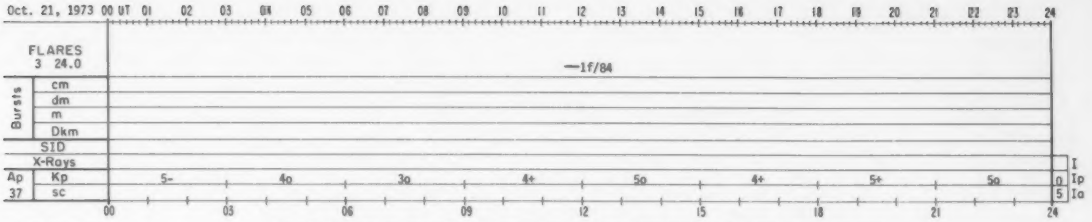
77 10 cm flux
0 Rz
CMP (12579) S35
12580 N02

Aurora overhead over USSR at ϕ = 59° 1200-1800; no coronal data 7 days earlier on E. limb.



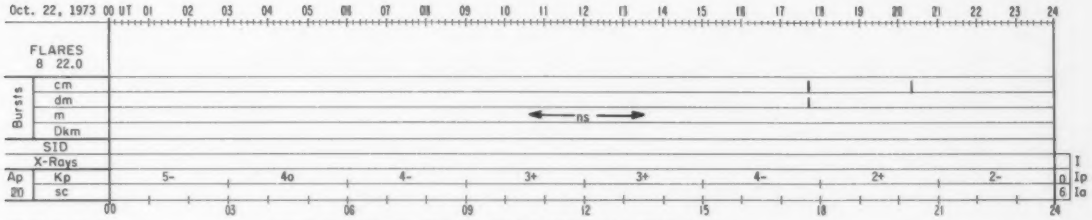
74 10 cm flux
0 Rz

Aurora overhead over USSR at ϕ = 59° 1200 and 1500-2000; no coronal data 7 days earlier on E. limb.



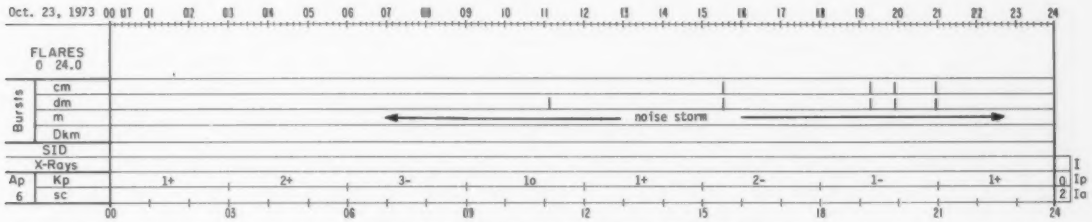
81 10 cm flux
0 Rz
CMP 12576 N09 (3&6)

One of five most magnetically disturbed days, with moderate activity all day; aurora overhead over USSR at ϕ = 59° 1400-2200, auroral glow visible between cloud over southern Scotland at ϕ = 58° 1900-2300; moderately br. green corona 7 days later on NW limb.



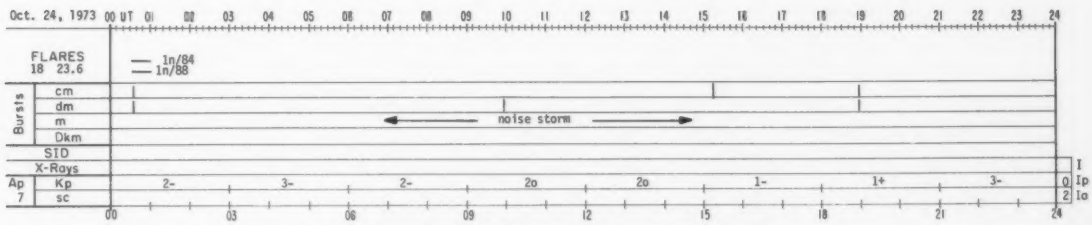
86 10 cm flux
16 Rz

Aurora overhead over USSR at ϕ = 51° 1300-1400 and ϕ = 59° 1400-2000.



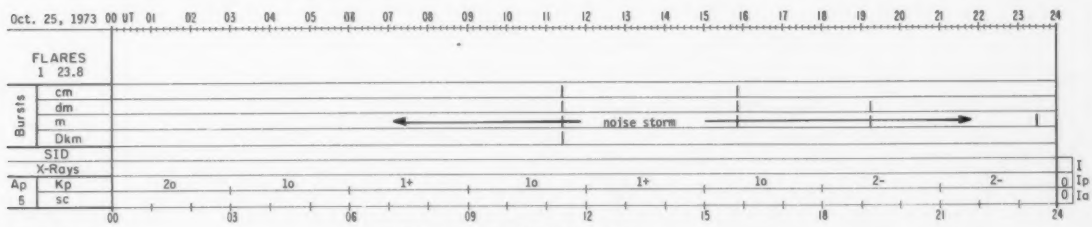
91 10 cm flux
28 Rz
CMP 12577 N15 (4) (19282) N15 (Bf)4 CMP Oct. 24

One of ten most magnetically quiet days; br. green corona 7 days earlier on NE limb.



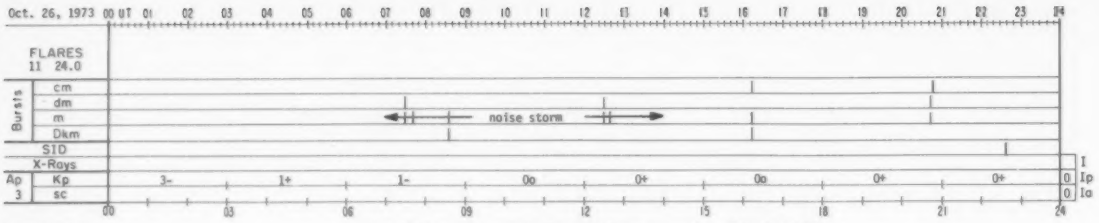
99 10 cm flux
36 Rz
CMP 12578 S15 (3)

One of ten most magnetically quiet days; moderately br. green corona 7 days later on NW limb.



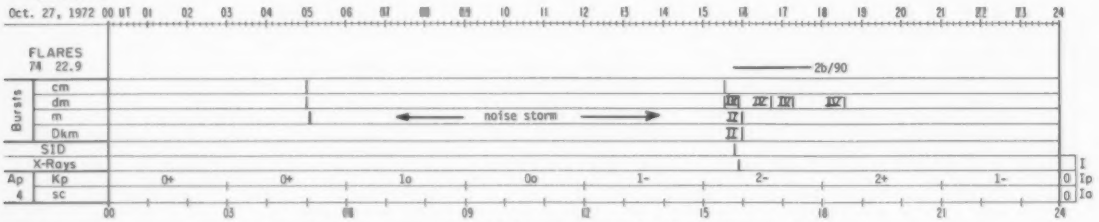
102 10 cm flux
53 Rz

One of five most magnetically quiet days.



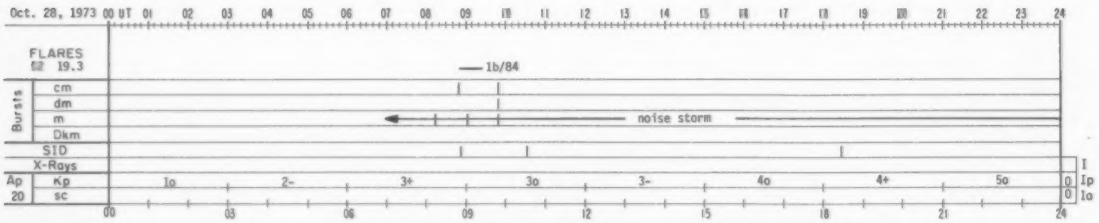
102 10 cm flux
59 Rz
CMP (12582) S14
(12593) S10

One of five most magnetically quiet days, extremely quiet after 0900.



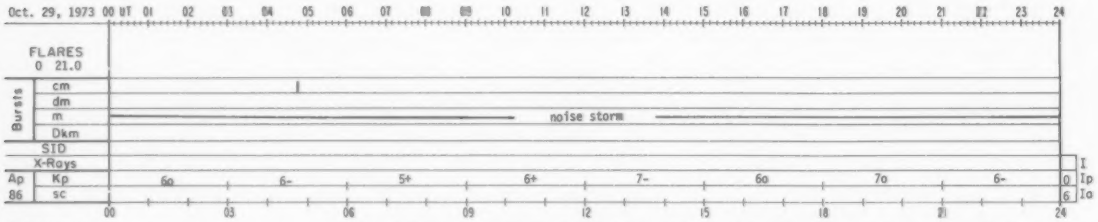
103 10 cm flux
63 Rz
CMP (12583) N18 (3)

One of five most magnetically quiet days; no coronal data 7 days earlier on E. limb, moderately br. green corona 7 days later on SW limb.



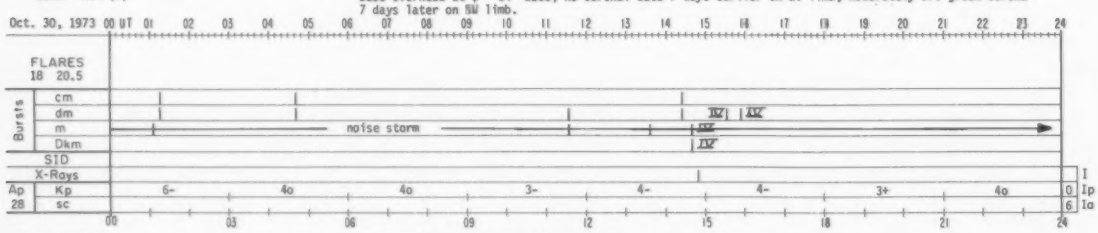
102 10 cm flux
62 Rz
CMP 12584 S13 (5) 19279 S12 βp CMP Oct. 27
12586 N23 (3) 19280 N21 αp

Aurora overhead over USSR at ϕ = 57° 1300-1500, ϕ = 58° 1600 and ϕ = 59° 1700-2100; no coronal data 7 days earlier on E. limb, moderately br. green corona 7 days later on SW limb.



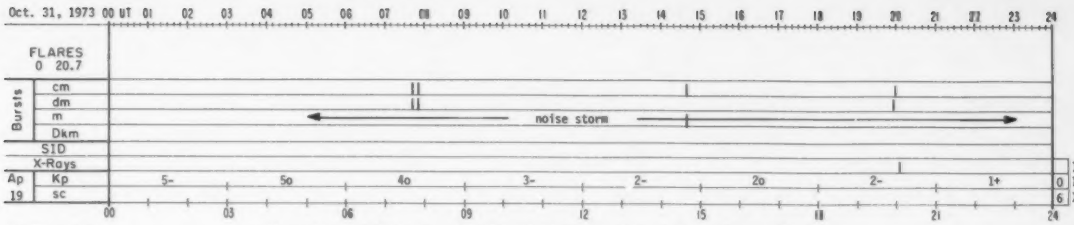
100 10 cm flux
65 Rz
CMP 12588 S16 (3) (19286) S17 (αp)2
(19287) S12 (αp)2 CMP Oct. 30
(12591) S01
12587 N34 (2)

One of five most magnetically disturbed days, with moderately severe storm all day; aurora overhead over USSR at ϕ = 57° 0900, 1000, 1400-1600 and 1700, ϕ = 54° 1100 and 1300-1400 and ϕ = 56° 1800 and 1900, mainly cloudy conditions over British Isles, but auroral glow visible over southern Scotland at ϕ = 58° 0030, cloudy conditions in northern part of British Isles continued, but auroral glow with rays visible over northern England at ϕ = 57° 1845-2300 and becoming identifiable there as rayed arc, base overhead at ϕ = 64° 2200; no coronal data 7 days earlier on E. limb, moderately br. green corona 7 days later on SW limb.



99 10 cm flux
55 Rz
CMP 12589 N13 (3) 19281 N11 (αp)4

No coronal data 7 days earlier on E. limb.



92 10 cm flux
37 Rz
CMP 12592 S12 (3) (19288) S11 (Bf)3
12590 N18 (3) (19283) N15 (ap)3
(19285) N20 Bf)3

Auroral glow visible over central Scotland between clouds at ϕ = 60° 0100; moderately br. green corona 7 days later on NW limb.

REGIONAL FLARE INDEX

OCTOBER 1973

MC MATH PLAGE NO.	LAT	CMP DATE	DATE FIRST FLARE	DATE LAST FLARE	FLARE-INDEX SUM	FLARE-INDEX MEAN	TOTAL NO. OF FLARES
12540	S14	73/10/01.5	73/09/27	73/10/06	51.93	5.19	6
12542	S14	73/10/02.9	73/09/27	73/10/08	150.93	12.58	12
12543	N15	73/10/03.8	73/09/29	73/10/07	31.02	3.45	3
12545	S12	73/10/05.0	73/10/10	73/10/10	2.74	2.74	1
12584	S13	73/10/28.8	73/10/21	73/11/04	113.87	7.59	13
12588	S15	73/10/29.1	73/10/22	73/10/24	15.76	5.25	3
12598	N18	73/10/31.7	73/10/25	73/11/06	92.81	7.14	5

Note:
The Regional Flare Index and count of flares in each region has in previous months included each maximum of a multi-maximum event. This has caused some regions to appear to be more flare producing than is probably warranted. Beginning with April 1972 only the principal maximum of a multi-maximum event will be used in the calculation. Also note that only the Confirmed Events as selected for the "I.A.U. Quarterly Bulletin on Solar Activity" are included in the calculation.

Because of differences in method of calculation, the dates of Central Meridian Passage for the McMath Plage Regions vary somewhat from those given elsewhere. Any region not listed here produced no confirmed flares during its disk passage.

MISCELLANEOUS DATA

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For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

COSMIC RAY INDICES

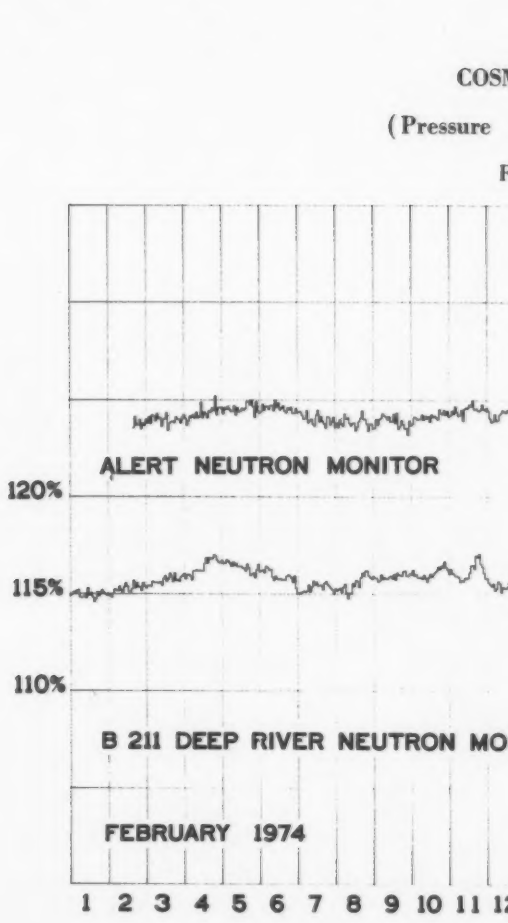
(Pressure Corrected Hourly Totals)

FEBRUARY 1974

DATE	ALERT	DEEP RIVER
1	0.0	7074.3
2	7596.7 (8)	7091.5
3	7610.9	7117.7
4	7633.0	7161.4
5	7651.1	7162.5
6	7651.3	7134.0
7	7615.9	7095.5
8	7602.1	7108.2
9	7604.5	7132.5
10	7621.7	7143.6
11	7645.0	7148.4
12	7631.0	7117.5
13	7589.8	7088.0
14	7576.8	7059.0
15	7559.4	7047.7
16	7550.5	7046.8
17	7567.0	7073.1
18	7600.9	7062.4
19	7582.7	7040.7
20	7573.5	7053.3
21	7591.0	7027.0
22	7558.2	7007.3
23	7557.5	7019.6
24	7574.0	6999.8
25	7560.8	6991.7
26	7550.0	7007.6
27	7542.5	7017.3
28	7548.5	7017.8

COSM

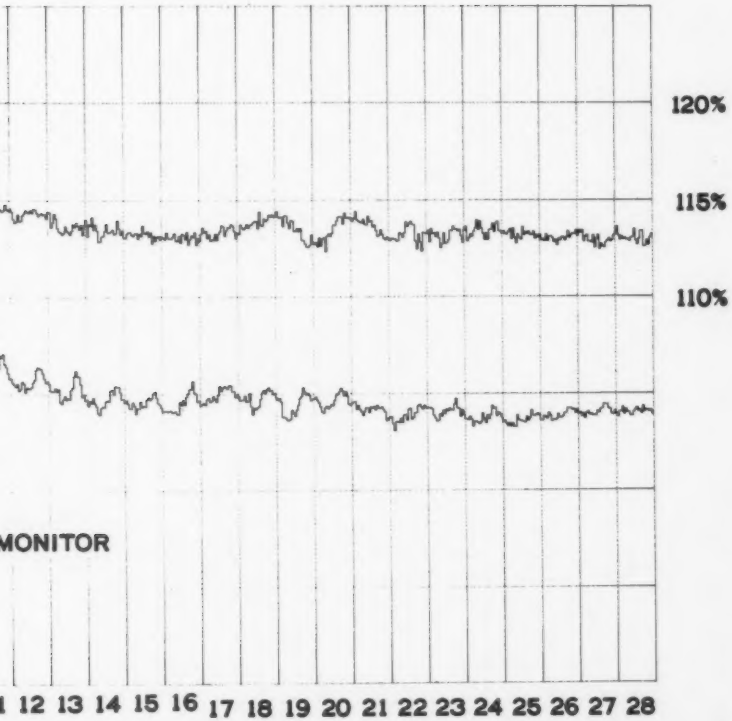
(Pressure



OSMIC RAY INDICES

e Corrected Hourly Totals)

FEBRUARY 1974



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